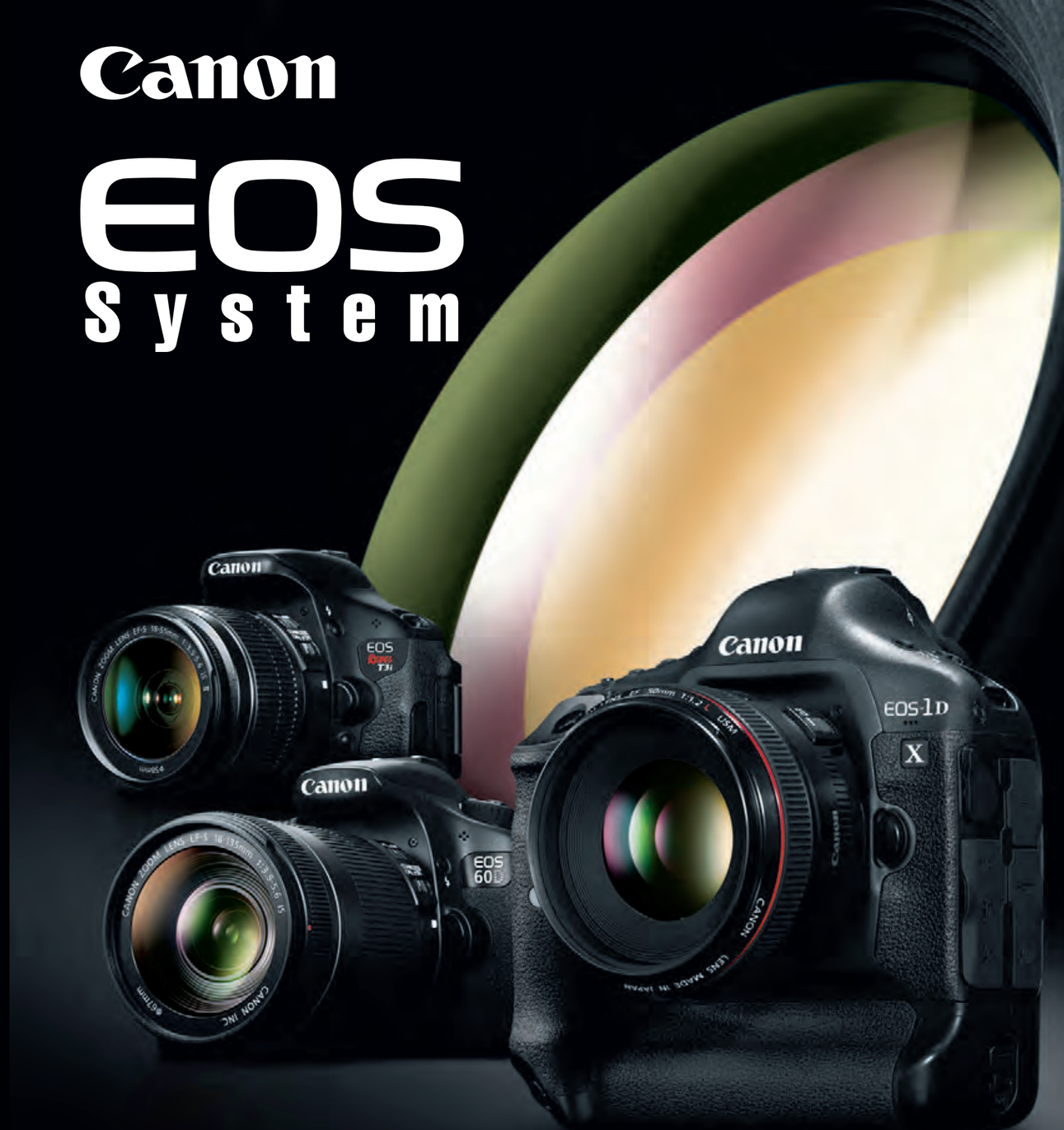
Canon

EOS System



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Canon: Digital Magnificence

For a winning combination of technology and performance, there's nothing quite like the EOS System. No matter the photographer, no matter the occasion, the EOS System delivers phenomenal still and moving images with ease. Proprietary Canon sensors and processors work in concert with proven camera and lens designs for incomparable photographic and EOS Full HD Video performance. A comprehensive collection of printers, projectors and software solutions, plus the line of Canon PowerShot compact cameras, combine to further complement the EOS System, creating a state-of-the-art technological synergy that not only presents the user with a cohesive photographic solution, but also simply makes for beautiful images. With powerful imaging systems bolstered by a network of online support from the Canon Digital Learning Center, great images start with Canon.

EOS SLR CAMERAS

Rugged construction, photographer-friendly features, and compatibility with the entire line of EF lenses and EOS accessories make Canon EOS SLR benchmarks for performance, ease of use, and quality.

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EF/EF-S LENSES

A unique blend of hyper-advanced optical, microelectronics, and precision manufacturing technologies, EF/EF-S lenses are perfected in Canon's laboratories and proven in the field.

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SPEEDLITES

Canon Speedlites are the ideal flash light source for EOS SLR cameras. They are technologically advanced to provide perfect exposure and illumination with just about any subject.

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- Wireless Flash Photography 52
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- Speedlite Accessories 55

EOS SYSTEM ACCESSORIES

Canon accessories are the best way to enhance EOS system performance and get the most out of EOS SLR cameras. There are solutions for virtually any shooting situation.

- Battery 56
- Wireless 58
- Remote Control & Accessories 59
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- Peripherals 62
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POWERSHOT

Built on some of the same technologies as EOS DSLR cameras, PowerShot cameras offer spectacular quality and control in a compact and easy-to-use body.

- PowerShot Lineup 64

PHOTO PRINTERS

From large format to 4" x 6" prints, Canon's imagePROGRAF and PIXMA photo printers enable photographers to produce professional-grade photoprints simply—almost anywhere, anytime.

- Photo Printer Technology 66
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REALiS PROJECTORS

The REALiS Multimedia Projectors from Canon feature LCOS (Liquid Crystal on Silicon) technology and AISYS (Aspectual Illumination System) Optics, raising the bar for quality in presentation.

- Projector Technology 72
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EOS EDUCATION & INSPIRATION

The Canon Digital Learning Center and Canon Live Learning serve to educate, inform and inspire EOS users. Learn from professionals how to get the maximum out of your EOS SLR camera.

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- Canon Live Learning 75
- Service and Support 76
- Canon Professional Services 77

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EOS SLR TECHNOLOGY

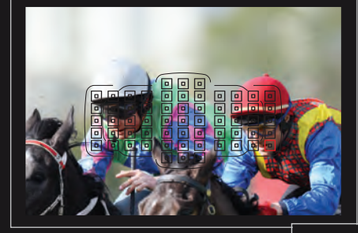
The history of Canon EOS SLR cameras is brimming with examples of technological innovations that have set new industry standards for performance and usability. And yet, at Canon, technology is never an end in itself. Every technological advancement must yield tangible benefits to the user. Does a new feature enable the camera to more quickly and faithfully respond to the photographer's will? Does a new material or process improve the camera's long-term reliability? Canon EOS advancements endure because they enhance the photographic experience, whether you are a seasoned professional or new to SLR shooting. Put simply, Canon EOS SLR technologies are impressive because of the quality of the images they enable you to create.

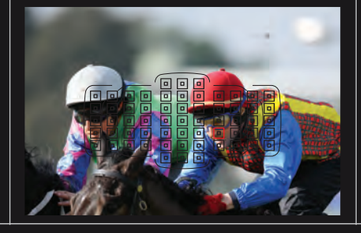
Autofocus Technology

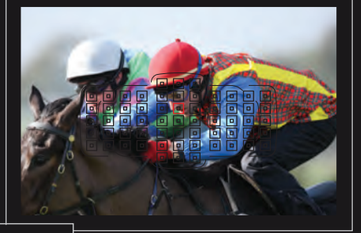
61 High Density Reticular AF

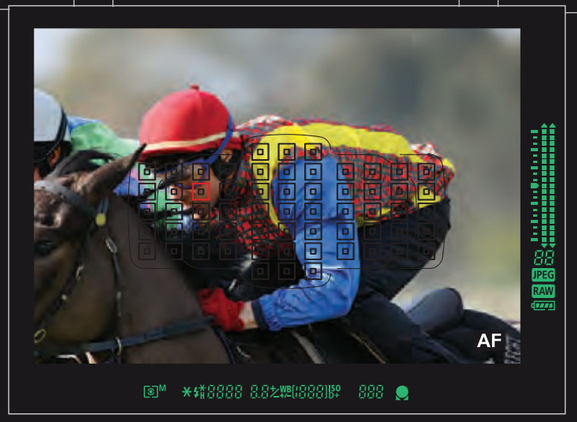
The EOS system leads the way in professional AF technology with multi-point AF systems that deliver an ever-increasing combination of accuracy and speed in diverse situations. The newest EOS camera, the EOS-1D X marks a new benchmark in AF technology, with a 61-Point High Density Reticular AF. It has improved tracking, 5 central dual cross-type points (f/2.8 diagonal), 21 central cross-type points (f/5.6 horizontal & vertical) and 20 outer cross-type points (f/4.0 horizontal), and is remarkably sensitive in low light situations (EV-2 for a central point with a f/2.8 lens). It remains stable in adverse conditions, with secondary imaging lenses that use temperature and humidity resistant glass molding.

61-Point High Density Reticular AF









Leading-Edge AF Technology *— The EOS-1D X incorporates a highly advanced 61-Point High Density Reticular AF that delivers exceptional focus accuracy. It provides multi-zone wide area coverage for better tracking and astonishing AF performance in low light.*

AF Modes

Canon EOS cameras feature a number of dedicated autofocus modes designed to enhance reliability in specific shooting situations. ONE-SHOT AF mode is ideal for static subjects — the camera rapidly selects the optimum focusing point, and the subject is instantly brought into focus even if it is off-center. AI Servo AF mode is excellent for moving subjects. Aided by a highly intelligent predictive focusing algorithm, it precisely tracks subject movement across the wide AF coverage area, automatically shifting the active focusing point vertically and horizontally as required. AI Focus AF mode, in which the camera automatically decides between ONE-SHOT and AI Servo AF modes based on subject movement, is ideal for shooting unpredictable subjects. The AI Servo AF III, found on the EOS-1D X uses new algorithms for even better predictive focus tracking performance when shooting subjects with unpredictable movement. Even difficult, high-magnification subjects, such as a flower in a breeze are captured accurately with a Canon macro lens using these new tracking algorithms.

High-Speed Shooting

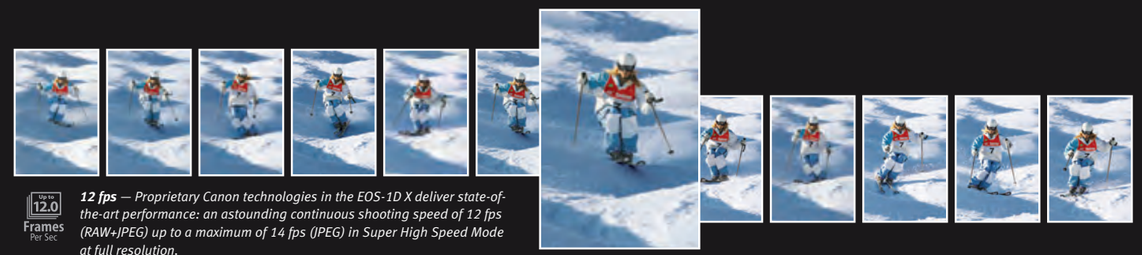
The new AF system found on the EOS-1D X combines fast 16-channel data readout from the camera's 18.1 Megapixel CMOS sensor, the processing speed of the Dual **DiG!C 5+** Image Processors with a speedier shutter and mirror system to raise the performance bar for all digital cameras, all while capturing images full-frame. A new mirror mechanism provides improved AF precision, speed and stability. The main mirror is equipped with two balancers and one bounce-lock mechanism, and the sub-mirror has two balancers and two bounce-lock mechanisms, thus effectively controlling mirror bounce. This contributes not only to high-speed continuous shooting, but also a stable viewfinder image plus greater AF and AE accuracy.

Enhanced Subject Tracking

Reliable subject identification and tracking features significantly improve a camera's performance in any number of situations. As seen on the new EOS-1D X, EOS iTR AF can use both face detection and color to track a subject. With acceleration and deceleration tracking, the EOS-1D X's AI Servo AF system can adjust response and react to sudden stops and starts, perfect especially for sports and wildlife photography. Specific parameters can be adjusted and refined and saved in the AF menu for later use.

Diverse AF Shooting Options

On the new EOS-1D X, there are 6 AF point selection methods: spot, single point, single point and adjacent 4 points, single point and adjacent 8 points, zone selection and full automatic, plus there's a dedicated AF configuration tool for control of AI Servo AF tracking parameters. And to manage all of the new shooting options, the EOS-1D X debuts a dedicated AF menu tab, so AF settings are faster and easier to access than ever before.



Up to 12.0 Frames Per Sec

12 fps *— Proprietary Canon technologies in the EOS-1D X deliver state-of-the-art performance: an astounding continuous shooting speed of 12 fps (RAW+JPEG) up to a maximum of 14 fps (JPEG) in Super High Speed Mode at full resolution.*

EOS Full HD Video Advantage

Select EOS DSLRs feature 1920 x 1080 Full HD video capture and offer the enhanced image quality, smooth frame rates and adaptive exposure compensation necessary in professional movie-making tools. By shooting video with an EOS DSLR, it's simple to take advantage of the image quality and characteristics intrinsic to DSLRs, resulting in richer, more detailed and more diverse images. The large sensor found in EOS DSLRs means more high quality pixels plus the potential to shoot at higher ISO sensitivities without loss of detail.

EOS Full HD Video

EOS DSLRs increase shooting flexibility for the videographer in that they allow for full use of Canon EF and EF-S lenses, including wide-angle, macro, super-telephoto, tilt-shift and fisheye, providing a wealth of focal lengths, depth-of-field and other creative shooting options once reserved for still photography. All Live View AF features can also be used in shooting video, and playback modes are available in-camera, with sound. Combined with their size, image quality and flexibility, EOS DSLRs with Full HD video capture are superlative all-in-one, multimedia image-capturing tools.

Exposure control in the display

Manual Control

For complete creative decision-making on the go, select EOS DSLRs offer flexible manual controls for their movie modes. Not only can one take advantage of the DSLR's range of ISO sensitivities, it's simple to control exposure and depth-of-field, all of which can have a profound effect on the mood of a scene. It's all as easy as the press of a button. By controlling depth-of-field, it's simple to create gorgeous background blur. Exposure can be determined and set even in complex lighting situations, maintaining the same look and feel throughout an entire scene, not just the initial shot.

Large CMOS Sensor

With amazing Canon CMOS sensors, video is easy to shoot, and looks better than ever before. Large sensors provide a look and perspective impossible to achieve with traditional video cameras, and the quality must be seen to be believed. Large sensors also capture more light, and can record at high ISO sensitivities with less digital grain and reduced image noise. This enables low-light shooting, without loss of detail, in situations previously impossible without artificial light. Although many devices, even mobile phones, offer HD recording, the quality of video captured by an EOS DSLR and its CMOS sensor is markedly vibrant and truer to life.

Depth-of-field

When shooting a video on an EOS DSLR, it's simple to control each shot's depth-of-field, an option previously available only when filming with expensive professional cinema cameras. Thanks to the physical size of EOS DSLR CMOS sensors, combined with the large maximum apertures achieved by Canon lenses, depth-of-field, or lack thereof, can be a creative decision reached solely by the photographer. If a large aperture is chosen, thus creating shallow depth-of-field, evocative, dramatic moving images with blurred backgrounds can be attained with ease, something simply not possible with smaller sensors or compact cameras. If everything must be in focus, shooting with a small aperture helps ensure phenomenal depth-of-field, for illustrative landscapes, architecture or anything else where all details must be recorded. The drama, beauty and mood achievable by controlling a movie clip's depth-of-field cannot be overstated — and an EOS DSLR controls it with ease.

Frame Rates

In select models, EOS Full HD video movies can be captured at 1920 x 1080 resolution, for up to 4GB per clip. Movies are saved as MOV files and can be viewed in Full HD with HDMI output. Other recording sizes include HD at 1280 x 720 (50/60 fps) or SD/VGA at 640 x 480 (50/60 fps). No matter the end-application, the proper resolution and frame rate is easily defined with EOS cameras.

Resolution	fps
1920 x 1080 (Full HD)	30P (29.97), 25P, 24P (23.976)
1280 x 720 (HD)	60P (59.94), 50P
640 x 480 (SD)	60P (59.94), 50P

Movie Crop

Movie Crop

The Movie Crop function, on cameras like the EOS 60D and EOS Rebel T2i, enables zooming at 7x the captured focal length for distant action and extreme close-ups. This feature is perfect when the chosen subject is in a crowd, like a specific athlete, when it's impossible to get close to the action. Recorded as a VGA movie, Movie Crop shots are perfect for emailing, posting online, or editing into other movie clips.

Interchangeable EF/EF-S Lenses – Creative opportunities are at your fingertips thanks to Canon EF/EF-S Lenses.

Telephoto lenses *Canon's amazing telephoto lenses bring the action closer, emphasizing the subject at hand.*

Macro lenses *let you get up close for detailed shots of small subjects.*

Wide-angle lenses *are perfect for shooting in tight spaces or to capture large expanses.*

Fisheye lenses *impart an extraordinary perspective and angle-of-view far beyond the limits of human vision.*

Tilt-shift lenses *allow you to control the area of focus.*

Creative Capabilities with EOS Lenses

From fisheye to super-telephoto, the amazing Canon EF and EF-S lenses offer a stunning combination of sharpness, speed, compactness and flexibility — the perfect complement to a user's creativity. With the ability to create images of great beauty, with controlled depth-of-field, interchangeable lenses bring moviemaking to a whole new level. And the range of focal lengths is simply staggering. With over 60 lenses available, including the Canon EF 8-15mm f/4L Fisheye USM, the world's first real fisheye zoom lens that functions as a circular fisheye and full-frame fisheye for a full size CMOS sensor, and as a full-frame fisheye for APS-C/H sizes, there's an EF or EF-S lens for everyone. No matter the photographer, no matter the situation, Canon's superlative lenses help ensure quality results.

Video Snapshot

Video Snapshot

With the Video Snapshot feature, found on cameras like the EOS Rebel T3i, short video clips (of 2, 4 or 8 seconds) can be stitched together, in-camera, into one video file as a "snapshot album" perfect for sharing online, or displaying to an HDTV directly from the camera.

Sound Recording Level Adjustment

To ensure the best possible recording of sound, a number of EOS DSLRs offer a host of user-controlled sound recording adjustments. The manual sound recording level can be adjusted to one of 64 levels, and an optional wind filter can minimize unwanted excess sounds. Whether recording through an external microphone (on certain EOS models) or through the camera's internal mic, this important feature means more audible voices, less unwanted noise, and better overall sound.

Movie Digital Zoom

Movie Digital Zoom, found on models like the EOS Rebel T3i, make it possible to zoom while shooting motion video from 3x to 10x, adding a whole new level of drama to video clips.

Automatic Splitting of Video Files

The FAT file system's 4GB size limit cannot be changed, but it no longer has to interrupt video capture. With the EOS-1D X, should a video file reach the 4GB limit during shooting, a new file is automatically created, enabling recording to continue without interruption. Sequential files can later be joined in an editor with seamless results.

Advanced Video Recording Options

Shooting HD video with an EOS DSLR, it's simple to take advantage of the image quality and characteristics intrinsic to DSLRs, as the large sensor found in EOS DSLRs means more high quality pixels, the potential to shoot at higher ISO sensitivities without loss of detail and full use of Canon EF and EF-S lenses with their wealth of focal lengths, depth-of-field and other creative shooting features. Most EOS DSLRs feature 1920 x 1080 Full HD video capture, delivering professional frame rates, adaptive exposure tools and phenomenal image quality. The new EOS-1D X offers users a choice between All-I and IPB compression and supports High Profile under the H.264/MPEG-4 AVC standard, combining high image quality with high coding efficiency and producing files that are well suited for transmission or broadcast. It automatically splits files greater than 4GB (FAT limitation) without interruption and offers the option of timecoding at all times (Free Run) or only during recording (Rec Run), useful for multi-camera shots. It also features improved sound recording adjustment capabilities, offering 64-step volume control accessible through the quick settings screen during video shooting. New sensor technology in the EOS-1D X significantly increases image quality, reducing color artifacts and moire.

©Clay Blackmore

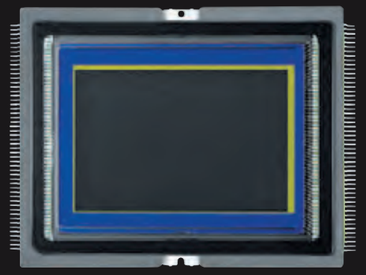
Canon CMOS Sensor

Taking advantage of its own proprietary technologies, Canon develops and produces its own CMOS sensors. Unlike CCD sensors, CMOS sensors convert and amplify signals before they are transferred to the image processor, enabling them to produce exceptionally clean image data and reduce power consumption by as much as 90%. Data transfer speeds are increased by using multi-channel signal paths that dramatically improve the camera's responsiveness. Canon's CMOS sensors incorporate a unique on-chip noise reduction technology to deal with both fixed pattern and random noise. In addition, a multilayer low-pass filter is placed in front of the sensor to isolate false colors that the sensor may detect. Then, Canon's own **DiG!C** Image Processor processes the image to help eliminate those colors while retaining full detail. CMOS sensors can also be fabricated to full-frame 35mm dimensions, an important consideration for photographers who wish to use their lenses without a conversion factor. Canon's CMOS sensors deliver outstanding resolution and signal purity, making them ideal for the most critical photo or video applications.

Full-Frame Canon CMOS Sensor

FULL FRAME CMOS

The Canon-manufactured full-frame CMOS sensor delivers professional performance with digital convenience. EOS DSLR cameras with full-frame sensors, found on the EOS-1D X, EOS-1Ds Mark III and EOS 5D Mark II, do not require a focal length conversion factor common to other digital SLR cameras on the market. Instead, they deliver the same angle-of-view as 35mm film cameras, so the working distance to the subject, with a given lens, is the same as it would be on film. Since you can use EF lenses on either 35mm film cameras or Canon DSLR cameras with the same results, the switch from film to digital is truly seamless. Full-frame sensors provide greater control over depth-of-field, which helps to create beautiful background blur, perfect for portraits. The large sensor area also helps to enable a marked reduction in noise levels at all ISO values. When combined with high resolution and smooth gradation from highlights to shadows, Canon DSLR cameras with full-frame sensors produce images that rival those taken with professional medium-format and large-format film cameras. For maximum control and dependable performance, the choice is simple—Canon full-frame DSLR cameras.



EOS-1D X Full-Frame CMOS Sensor (actual size)

When using the same lens with different cameras, the angle-of-view varies depending on the sensor size.

Effective Light-gathering

The EOS-1D X sensor has 18.1 effective megapixels with individual 6.95 µm pixels and the EOS 5D Mark II and the EOS-1Ds Mark III have 21.1 megapixel sensors with individual 6.4 µm pixels. An improved S/N ratio plus a new photodiode structure with an increased photoelectric conversion rate on the EOS-1D X's sensor increases sensitivity by approximately 2 stops over previous models, meaning higher ISOs with the lowest noise of any EOS DSLR.

High ISO *– Whether shooting stills or video, Canon EOS DSLR cameras capture silky-smooth low-noise images that are sharp with a wide dynamic range of color and tone, even at high ISO speeds.*

DiG!C 5+ / 4 / III Image Processor

DiG!C 5+ DiG!C 4

Designed to maximize the performance between the capture and recording stages of digital photography, the **DiG!C** Image Processor uses advanced signal processing technologies to enhance image quality and deliver a more intuitive, responsive camera. Processors like the **DiG!C 4**, found on the majority of EOS DSLRs speed up camera operations such

that advanced technologies like Face Detection AF, Live View composing, Full HD movie recording and more are simple and easy. The **DiG!C 5+** Image Processors found on the EOS-1D X turbocharge performance, and can even support compensation for chromatic aberration in both still and motion images.

Extensive ISO Range*

ISO 51200 25600

EOS SLR cameras feature an extensive ISO range for greater flexibility in diverse photographic situations. The EOS-1D X features the breathtaking ISO range of ISO 100-51200 (L: 50, H1: 102400, H2: 204800)!

**Standard output sensitivity. Recommended exposure index.*

Even at higher ISO settings where one might expect to see a higher degree of noise, the renowned Canon CMOS sensor and noise reduction system work to ensure superb image quality. Accordingly, even the most critical photographers can use EOS SLR cameras with confidence, no matter the light.

Advanced 14-bit A/D Conversion

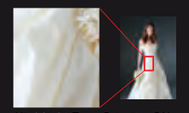
EOS DSLR cameras employ 14-bit converters to process the output of the imaging sensor. Compared to the 12-bit converters used in most digital cameras, the Canon design helps ensure smoother tonal transitions, more natural gradations, and superb color fidelity. RAW images are recorded at 14 bits so that processed 16-bit TIFF images contain the full range of tonal values captured by the sensor.

Lens Aberration Correction

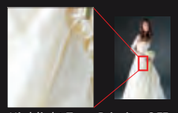
With the new EOS-1D X and its Dual **DiG!C 5+** processors, chromatic aberration in Canon lenses can be corrected at the time of shooting. Select EOS cameras can read the correction data from lenses, and those lenses can be registered to the camera. The EOS-1D X can even distinguish between different lenses of the same model by supporting registration of serial numbers (with compatible EF lenses).

Highlight Tone Priority

Loss of highlight detail is one of the greatest concerns for photographers shooting digitally in brightly lit and contrasty situations. Canon's Highlight Tone Priority function calculates the exposure to expand the image's dynamic range so that more detail is preserved in highlights. This renders a more continuous tone image without blown highlights, and helps to save time in post-processing for highlight retrieval.



Highlight Tone Priority: ON



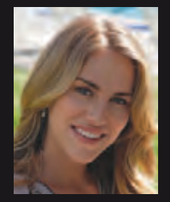
Highlight Tone Priority: OFF

Lens Peripheral Illumination Correction

Another feature available in Canon's newest EOS DSLRs is Canon's Lens Peripheral Illumination Correction feature. Taking into account the lens in use, this feature automatically brightens the light level at the four corners of the composition where light falloff may have occurred. Peripheral illumination characteristics and correction data are detected automatically on a number of Canon lenses and can be entered manually through Canon's EOS utility software. This function can be applied when shooting to JPEG images, and in post-processing with RAW images.

Auto Lighting Optimizer

One of Canon's newest technologies, the Auto Lighting Optimizer, automatically corrects image exposure to help ensure accurate brightness and contrast. It can actually brighten areas of the composition while maintaining highlight details and accurate exposure in others, or darken areas of composition while maintaining brightness and shadow details in others. This remarkable feature is available as both an automatic feature in Full Auto and Creative Auto shooting modes, and can be used and fine-tuned in other modes. The Canon Auto Lighting Optimizer ensures beautifully exposed images that require little to no post-production work.



Auto Lighting Optimizer OFF

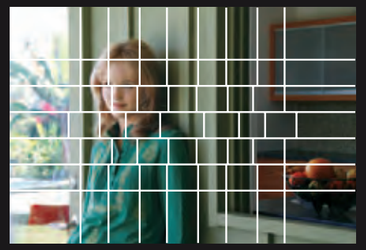
Auto Lighting Optimizer ON

EOS iSA System

The new 100,000-pixel RGB Metering Sensor with a dedicated **DiG!C 4** Image Processor, found on the new EOS-1D X delivers substantial improvements in evaluative ambient and flash metering. The sensor has 252 distinct zones, and reduces to 35 zones in low light. It detects face and color to perform more accurate subject recognition, which is used to enhance the performance of the AE, E-TTL and AF systems.

Superlative Exposure Control

Canon EOS DSLRs incorporate advanced exposure control systems, offering the photographer exceptionally precise AE (auto exposure) with a wide range of metering options. Full-frame evaluative metering incorporates the camera's multi-zone sensor reading with specific focusing point data. The onboard microcomputer compares input from all zones and calculates optimum exposure. While evaluative metering helps to assure excellent results in even the most challenging lighting situations, advanced photographers can choose from among several additional metering options. Center-Weighted metering is available for those who prefer a more traditional pattern. Partial metering limits readings to sensor zones in the center of the image area, giving the photographer more area-specific control. Spot readings can be taken at the center of the frame area or, with some models, linked to an AF point. With certain EOS cameras, up to eight separate spot meter readings can be recorded and averaged. For cameras like the EOS 60D, Canon developed the iFCL (intelligent Focus Color Luminance) 63-zone dual-layer metering system to incorporate the color wavelength surrounding the chosen focus point to help ensure more natural color rendition. Flash photography with EOS Systems also benefits from the extraordinary exposure control technology Canon has created. E-TTL (Evaluative Through-The-Lens) and E-TTL II autoflash systems work in combination with the camera's multi-zone metering sensor to help take the guesswork out of flash photography. The camera performs instantaneous calculations based on readings from the preflash, ambient lighting conditions and assessment of subject location to determine the optimum flash output and exposure settings. With E-TTL II, the calculations also incorporate distance information from compatible EF lenses, enabling the system to better handle dark, light and highly reflective subjects. Resulting images can have a virtually perfect balance between ambient light and flash illumination, even in complicated lighting situations and compositions.



Multi-zone Metering *— Canon's sophisticated multi-zone Evaluative metering system considers not only the active focusing point, but also a range of metered values throughout the frame to determine correct exposure even in difficult lighting.*

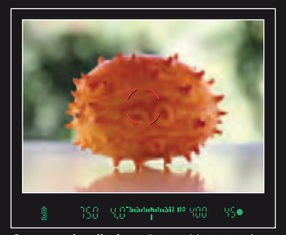
Intelligent Viewfinder

Intelligent Viewfinder

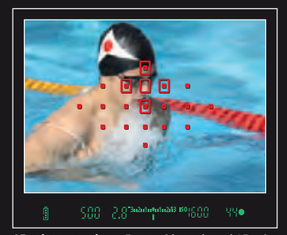
The Intelligent Viewfinder, found on the EOS-1D X and EOS 7D, uses a transparent LCD monitor to superimpose a customizable combination of focus points, gridlines and other shooting information within the viewfinder. Whereas with other EOS cameras' viewfinders the representation of AF points and metering areas are static, the Intelligent Viewfinder allows the information to be displayed, adjusted, or hidden with ease. This means less distraction and more clarity to view the image in its entirety. The Intelligent Viewfinder includes a Grid Display and in Spot metering mode, the specific area metered is shown.

Intelligent Viewfinder – Change your viewfinder display to match any situation.

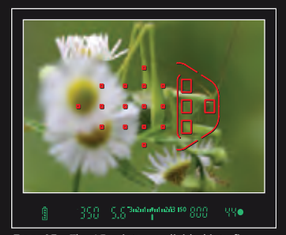
AF point automatic selection *– The camera automatically chooses the correct AF point.*



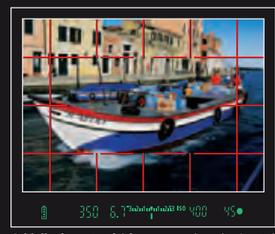
Spot metering display *– Focus with a central, circular zone for accurate exposure control.*



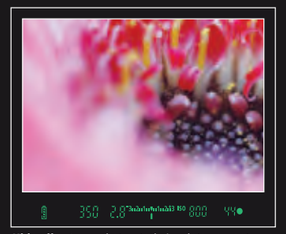
AF point expansion *– Focus with a selected AF point and points surrounding it. Great for moving subjects.*



Zone AF *– The AF points are divided into five focusing zones, useful for off-center shots.*



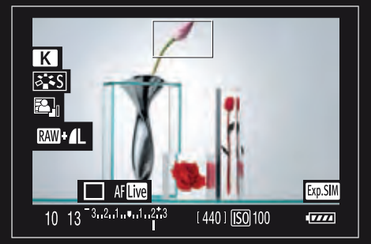
Grid display *– Useful for scenes where horizontal or vertical lines are stressed, such as architecture.*



Hide all *– An unobstructed view lets you get close to your subject and capture detail.*

AI Servo AF tracking display *– Provides instant feedback of AF points tracking a moving subject.*

Spot AF *– Focuses on an even smaller area for precise focus on small subjects.*



Live View Function *– With Live View Function, images can be composed and captured from the camera's LCD monitor.*

10x magnified view.

Multi-control Dial on EOS 60D

Viewfinder

100% Viewfinder

No matter the camera's specifications, a clear, bright viewfinder is the photographer's first tool for great images. Canon innovates with their viewfinders, especially with the viewfinders in the EOS-1D Mark IV, EOS-1Ds Mark III and EOS 7D, by offering approx. 100% viewfinder coverage, and several EOS SLRs have a larger pentaprism for higher viewfinder magnification. These cameras offer the best view of any EOS digital camera to date. All EOS DSLR cameras offer dioptric correction and several EOS DSLR cameras have a number of different viewfinder accessories, including up to 11 different focus screens available for almost any application.

Live View Function

LiveView MODE

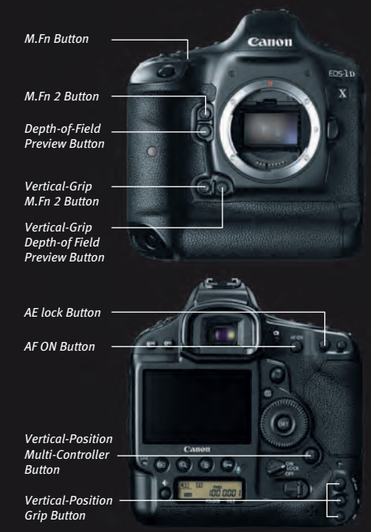
Canon's spectacular Live View shooting is now available through most of the EOS digital models. Live View Function, where the photographer can compose and shoot directly from the camera's LCD monitor is an indispensable feature for creative photography in any number of situations. It enables the photographer to zoom in and navigate the composition 5x or 10x its normal size, while enabling critical focus and allowing more attention to detail. Users can even choose a grid overlay, perfect for architectural photography. In the studio, Live View Function can be used remotely (via a computer) through the camera's USB connection (via the gigabit Ethernet port on the EOS-1D X), or wirelessly if the optional Wireless File Transmitter is used.

Live View Focusing

Canon's Live View Function includes 3 focusing modes: Quick mode, Live mode, and Face Detection Live mode. In Quick mode, One-Shot AF is set automatically and the AF point is selectable even while the Live View image is displayed. In Live mode, AF can be started by pressing the AE button for either AF mode. In Face Detection Live mode, the largest face near center is detected initially, but the multi-controller can be used to select any face detected.

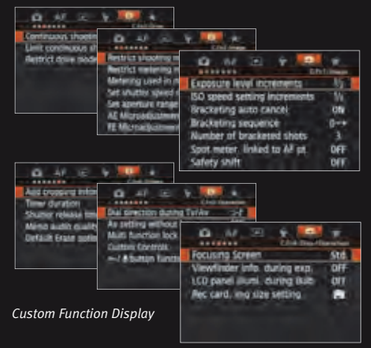
Superb Ergonomics

EOS cameras not only produce phenomenal images, they are designed to be comfortable to use and carry all day long. From bright viewfinders, to tactile buttons and knobs, Canon is constantly refining ergonomics based on the feedback of real users. Canon's Custom Functions further enable photographers to tailor features and operations to their shooting style. The new EOS-1D X has new, programmable function buttons located on the front of the camera that enable fast access to frequently used features the photographer specifies. Its vertical grip is redesigned for comfort and familiarity, and combined with a vertical position Multi-controller, provides every option and button found in the horizontal for uninterrupted, intuitive shooting no matter the camera's orientation. Plus, the EOS-1D X's new Multi Electronic Lock allows the Main Dial, Quick Control Dial and Multi-Controller to be all locked, individually or together.



Custom Function

Camera operations are enhanced by Custom Functions, conceptualized and developed by Canon. Custom Functions enable photographers to tailor features and operating functions to suit their own shooting style, or to optimize camera performance for specific subjects, shooting conditions or a signature style.

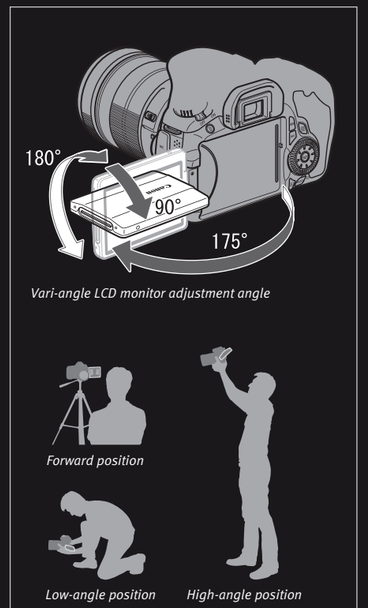


Custom Function Display

Vari-angle LCD Monitor

Vari angle LCD

Found on the EOS Rebel T3i and EOS 60D, the brilliant Canon Vari-angle 3.0-inch Clear View LCD monitor with 180° vertical rotation sets new standards for clarity and flexibility. Designed to flip out from the back of the camera, the Vari-angle monitor's 180° rotation means it can be adjusted for low angle or high angle and can even be positioned forward directly at the subject (when facing the subject, the displayed image automatically flips, showing a right-side-up mirror image, perfect for self-portraits). Because the monitor opens out sideways, it switches between low and high angle shooting without interfering with the use of auxiliary camera grips or tripods.



Vari-angle LCD monitor adjustment angle

Forward position

High-angle position

Low-angle position

Low-angle

Maximum Durability and Performance

For professionals who demand nothing less than the best, EOS DSLR cameras are designed to perform admirably and consistently no matter the situation. Many EOS bodies are constructed of rigid, high-strength magnesium-alloy for rugged performance and professional cameras like the EOS-1D X and the EOS-1Ds Mark III feature weather sealing surfaces and connection points for seamless performance in wet and dusty situations. The EOS-1D X even has a new lightweight shutter with carbon-fiber blades that can maintain up to 14 fps performance without compromise, for up to 400,000 cycles and has a minimum shutter release lag of 36ms (when shooting at maximum aperture).

Locations provided with dustproof and drip-proof measures. (EOS-1D X shown)

EOS Integrated Cleaning System

EOS | Integrated Cleaning System

Canon has designed an Integrated Cleaning System with a Self Cleaning sensor unit customized to the specifications and performance characteristics of each EOS DSLR camera that helps combat stray dust that can enter the camera when changing a lens or when out in the field. The front surface of the sensor's IR-cut/Low-pass filter cleans itself automatically with ultrasonic vibrations every time the camera is turned on or off. Removed dust adheres to material around the filter to help it stay off. With DPP, dust missed by the cleaning unit can be captured by Canon's Dust Delete Data Detection and can be erased from the image file.

Dual Axis Electronic Level Sensor

Dual-Axis Electric Level

Developed by Canon and featured in the EOS-1D X and EOS 7D, the brilliant Dual Axis Electronic Level display aids in achieving perfectly oriented shots. Visible in the viewfinder and on the camera's LCD monitor, in both Live View mode or as a standalone, and capable of displaying both roll and pitch in 1° increments, the Dual Axis Electronic Level Sensor is invaluable for architecture, macro photography, video, or any situation where critical composition is important.

Viewfinder display with Intelligent Viewfinder.

View of rear LCD monitor with Live View.

Shooting Modes

Beyond normal shooting modes such as Auto, Aperture priority and Shutter priority, select EOS DSLRs offer shooting features such as Picture Style technology, which optimizes camera settings for subjects like landscapes and portraits, even monochromes. For even more creative imaging freedom, Canon developed Basic+. Basic+ makes it easy to create whatever image effects desired. Basic+ has two initial option categories: In "Shoot by ambiance selection," standard white balance and exposure compensation are altered according to the chosen ambience,

Basic+ screen

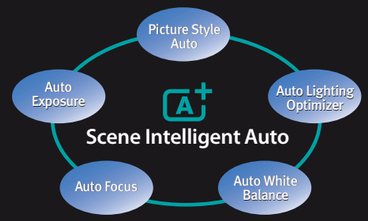
like vivid, soft, warm, intense, cool, brighter, darker and monochrome. In "Shoot by lighting or scene type," white balance is adjusted according to selections like daylight, cloudy, shade, tungsten, fluorescent and sunset. These features, complemented by the Canon Auto Lighting Optimizer, Lens Peripheral Illumination Correction, Highlight Tone Priority and Noise Reduction feature help ensure accurate, nuanced results.

Landscape *– Great for shooting nature scenes and blue skies, this setting enhances the blues and greens typical in landscapes, and enhances saturation, contrast and sharpening.*

Scene Intelligent Auto

Scene Intelligent Auto

Scene Intelligent Auto, found on the EOS Rebel T3i merges a number of very complex measurements into settings that will ensure photographs of gorgeous tonality, accurate color, sharp focus and phenomenal detail.



Picture Style Technology

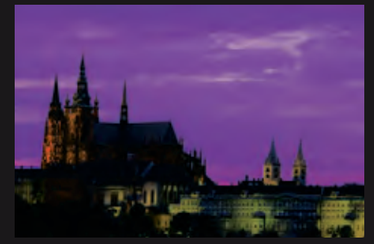
Picture Style

With the myriad features and settings available, even the best photographer might occasionally have doubts as to whether all of the camera settings are optimal for the shot. Canon's ingenious Picture Style feature comes to the rescue, providing a number of user-friendly presets, including standard, neutral and landscape, giving the ability to fine-tune the images the camera produces. They enable the photographer to make optimal choices based simply on the type of shooting. These presets can be used in much the same way one would use different types of film, and more can be created using Canon's included Picture Style Editor Software. Individual camera settings—such as sharpening, contrast, color tone, and saturation can be overridden if need be.

Use Picture Styles to Easily Achieve the Effect You Want

Monochrome *– This setting emulates the color filters of silver halide film for bold black and white images and allows for red, green and other types of filter work.*

Portrait *– The perfect setting for photographing people, the portrait setting adds warmer skin tones with a slight boost in contrast and in-camera sharpening.*



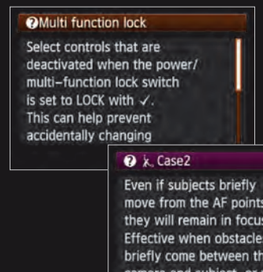
Twilight *– Capture the subtle vibrancy of colors illuminated by the soft glow of the receding sun using the twilight setting. (Extended Function, online support only.)*

Advanced RAW+JPEG Recording (in-camera processing)

Best described as "digital negatives", RAW images contain pre-processed image data as captured by the sensor and, with post-processing, they yield the highest image quality possible from a DSLR. While professionals and advanced amateurs often prefer to shoot in RAW mode, JPEG images take up significantly less storage space and are often more immediately pleasing to the eye. With Canon's EOS DSLR cameras, images can be captured in a number of RAW and JPEG modes, depending on the camera's sensor, as well as record numerous combinations of RAW, sRAW and JPEG images simultaneously. Several models even offer in-camera post processing. The EOS-1D X features in-camera post processing with image correction options like white balance, brightness, picture style and more, plus image resizing with JPEG images. Additionally, the EOS-1D X features Expanded Quick Control functions during playback like image protect, image rotate, rating, RAW image processing, resize, highlight alert, AF point and image jump, meaning a streamlined workflow can begin in the field.

Enhanced GUI (Feature Guide, Easier Menu System)

While Canon's Graphical User Interface has long been the industry standard, Canon is constantly refining and developing new features for a smoother user experience. Accordingly, the GUI has been revamped for the new EOS-1D X based on the response and feedback of professional users. Its Graphic User Interface is faster, more precise and more intuitive than ever. The menu structure has been redesigned so that frequently used functions previously buried in the menu hierarchy are brought to the front. Operations previously assigned to buttons, controls, menus and custom functions have been consolidated for quick access in the menu, ensuring the photographer can concentrate on shooting images with the knowledge that the camera's settings are just right. The EOS-1D X, the EOS Rebel T3 and Rebel T3i offer operational help through the press of the Info button, identifying features quickly, instructing on their use and minimizing confusion, even for photographers operating the camera for the first time.



Feature Guide

Help Function Display

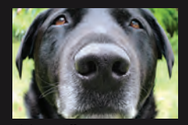
Multi-Aspect Ratios

For the ultimate in custom shooting, EOS models like the Rebel T3i are able to shoot in a number of aspect ratios, like 4:3, 3:2 16:9, even 1:1 for square compositions!

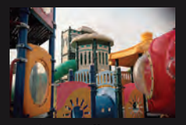
Creative Filters

EOS models like the Rebel T3i and EOS 60D borrow several popular creative filters like those found in Canon's popular PowerShot cameras, like Grainy B&W, Fisheye Effect, Toy Camera Effect and Miniature Effect.

Miniature Effect



Fisheye Effect



Toy Camera Effect

Grainy B & W Effect

Multiple Exposures

Certain EOS cameras, like the EOS-1D X offer multiple exposure shooting modes for film-like image creation, with the convenience of in-camera processing. In Function Priority mode, 3-4 individual shots are taken, allowing for proper exposure and composition. In Burst Mode, continuous shooting is prioritized, up to 9 shots are captured, perfect for capturing golf or baseball swings.

Wireless Transmitter Technology

Wireless Transmitter for EOS-1D X

As quickly as the DSLR camera has become commonplace in the hands of professional photographers and enthusiasts alike, so too has wireless communication progressed between the SLR and external components. The EOS DSLRs have a number of dedicated Wireless File Transmitters that keep the camera connected to the wireless world, simply, with tremendous speed. Whether connected through a port on the side of the camera, or incorporated into a camera-integrated design – some units serve as an auxiliary hand grip – Canon Wireless Transmitters can connect securely to Local Area Networks (LAN) wirelessly (with a range up to approximately 500 feet) or directly, and can connect and upload to FTP (File Transfer Protocol) or dedicated WFT Servers.

Fast, Reliable Image Data Transfer – The WFT-E6A (EOS-1D X), WFT-E5A (EOS 7D), WFT-E2 II A (EOS-1D Mark IV and EOS-1Ds Mark III) and WFT-E4 II A (EOS 5D Mark II) feature IEEE802.11a/b/g compatibility, WPS compatibility, WFT Server Remote Live View, a camera linking function and Bluetooth connectivity. The WFT-E6A conforms to IEEE 802.11 a/b/g/n standards, performing up to 2.5x faster than other models, and features an image resend feature that ensures that all images get transferred, even if wireless signal drops interrupt transmission.

Media Server Function – Models such as the WFT-E6A and WFT-E5A also include a media server function. With select models, in WFT Server mode, up to three separate computers can access the camera's memory card using a standard Web browser from anywhere in the world (Microsoft Internet Explorer®, Apple Safari®, etc.). Images can be selected from the browser window and dragged onto a computer's desktop or to a folder, which copies the full file to a computer. Remote firing of the camera over the Internet is also possible using the Remote Live View function. With the EOS-1D X and the EOS 7D, a dedicated media server can also be created with DLNA (Digital Living Network Alliance) compliant devices, allowing numerous points of access to images instantaneously.

Computer Connectivity – EOS Utility Mode, or PTP (Point-to-Point) connectivity, allows the photographer to connect a single camera to a computer for advanced two-way communication and professional tethered camera operation. Certain WFT units can also connect to select GPS units adding location and time code shooting data. Plus, WFT models can be used as remote control receivers, allowing for wireless shooting and control, from a range of Wi-Fi enabled handheld devices including smartphones.

USB Host Capability with GPS Support – Photographers can take full advantage of the WFT unit's USB host capability* by connecting a compatible GPS device via USB cable or optional Bluetooth dongle. This makes it possible to add GPS coordinates, altitude and UTC time code to embedded shooting data within image files. Compatible GPS units include several in Garmin's GPSMAP series and in the Magellan eXplorist series (using NMEA 0183 v.2.0.1 output data standard or "Garmin protocol"). USB Host capability also allows connectivity to some external hard drives for added storage options.

Weather-Resistant Design –The WFT units designed for the EOS-1D class professional DSLRs feature rugged and lightweight magnesium alloy bodies, just like the cameras to which they attach. Moreover, they feature the same fully sealed construction, ensuring that the highly weather-resistant design of the camera is not compromised.

Extensive Wired and Wireless LAN Functions – Select WFT units not only support wireless LAN environments but also enable wired network connections, providing high-speed 100Base-TX communication.** Built-in WPS (Wi-Fi Protected Setup) makes it easy to make secure LAN connections.

Linked Multi-Camera Shooting – Using multiple WFT units on compatible EOS digital cameras, up to ten Slave/Remote cameras can be linked wirelessly to a master camera. Connections are made simply and conveniently via wireless LAN. Remote camera shutters are automatically tripped when the master camera shutter is released. With such a setup, a photographer can, for example, shoot simultaneously from various angles.

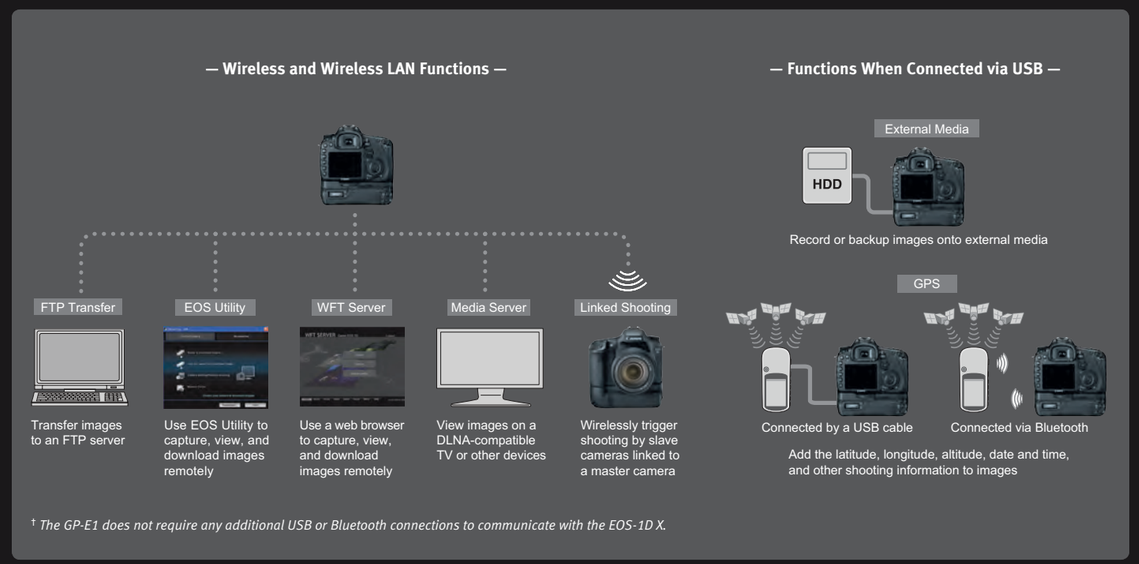
**The WFT-E6A provides an internal Bluetooth function but does not have USB host capability. A dedicated GP-E1 accessory is available for the EOS-1D X.*

***The WFT-E6A has no provision for wired LAN connectivity because the EOS-1D X is equipped with a Gigabit Ethernet port.*

Expandable Accessories (GPS, compass, etc.)

The GPS Receiver GP-E1† attaches to the EOS-1D X, offering the same dust and waterproof protection as the camera body itself, features its own power supply and is always ready to append location data to images. It records latitude, longitude/elevation and UTC time, and features GPS Time Sync Function and features an electronic compass that records the camera's orientation when shooting.††

GPS Receiver for EOS-1D X



† The GP-E1 does not require any additional USB or Bluetooth connections to communicate with the EOS-1D X.

†† In certain countries and regions, the use of GPS may be restricted. Therefore, be sure to use GPS in accordance with the laws and regulations of your country or region. Be particularly careful when traveling outside your home country.
As a signal is received from GPS satellites, take sufficient measures when using in locations where the use of electronics is regulated.

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NEW

EOS-1D X

The Ultimate EOS.

Canon has brought the best of the EOS-1 Series of digital cameras into one phenomenal, go anywhere, shoot anything dynamo: the new flagship of the EOS line, the EOS-1D X*. With a full-frame 18.1 Megapixel CMOS sensor, an all-new Dual **DiG!C 5+** Image Processors, image capture at up to 14 fps, faster, more accurate and customizable AF, plus an all-new 100,000-pixel RGB Metering Sensor with its own **DiG!C 4** Image Processor, the EOS-1D X reaches new levels of performance with speed, continuous shooting, focus and metering accuracy, light sensitivity, and ease of use. With rugged construction, improved HD video capture, numerous connectivity options, and much, much more, the EOS-1D X is truly the ultimate EOS.

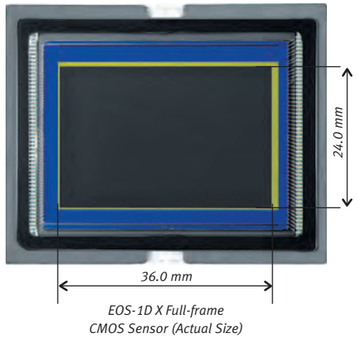
18.1 MEGA PIXELS CMOS | DiG!C 5+ | FULL FRAME CMOS | Picture Style | FULL HD 1080 | Up to 12.0 Frames Per Sec | LiveView MODE | ISO 51200 25600 | 61 High-Density Reticular AF | EOS Integrated Cleaning System | 3.2" LCD ClearView II | DIRECT PRINT | PictBridge | Hi-Speed USB

* This device has not been authorized as required by the rules of the Federal Communications Commission. This device is not, and may not be offered for sale or lease, or sold or leased,until authorization is obtained.

18.1 Megapixel Full-Frame CMOS Sensor

18.1 MEGA PIXELS CMOS | FULL FRAME CMOS

The EOS-1D X features a Canon produced full-frame 18.1 Megapixel CMOS sensor that's designed from the ground up to create high resolution, perfectly detailed images with great speed and clarity. A full 24 x 36mm, the sensor captures 5208 x 3477 large individual 6.95 µm pixels and has a much-improved S/N ratio resulting in better images from the start. A new photodiode structure with an increased photoelectric conversion rate increases the sensor's sensitivity by approximately 2 stops over previous models, meaning higher ISOs with the lowest noise of any EOS DSLR. And a 2-line 16-channel simultaneous signal readout means speeds of up to 12 fps (14 fps in Super High Speed Mode) are possible, even at full resolution!



EOS-1D X Full-frame CMOS Sensor (Actual Size)

Dual DiG!C 5+ Image Processors

DiG!C 5+

For a whole new level of performance, the EOS-1D X uses Dual **DiG!C 5+** Image Processors. Delivering speeds of up to 12 fps (RAW + JPEG) and 14 fps (JPEG). Compared with the predecessor, Canon's **DiG!C 4** Image Processor, the **DiG!C 5+** Image Processor offers approximately 17x faster processing speed, and features new algorithms that promote greater noise reduction at higher ISOs. In addition to conventional image processing functions, the Dual **DiG!C 5+** Image Processors offer real time compensation for chromatic aberration in both still and motion images. With the power of these two processors, speed improvements are noticeable from the instant the camera is turned on and the stunning results speak for themselves.

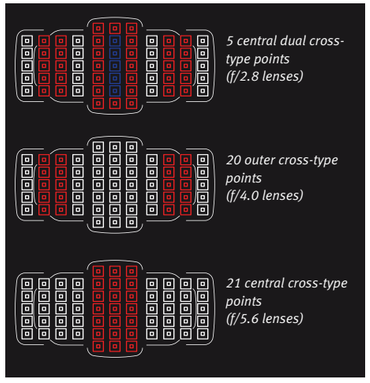
51200 High ISO Standard

ISO 51200 25600

The EOS-1D X not only offers higher standard and expanded ISOs, it delivers a score of new options to enhance shooting in varied and fast-changing lighting situations. With a standard range of ISO 100-51200, the EOS-1D X represents a 2-stop increase in sensitivity over previous cameras. Thanks to the improved signal-to-noise ratio of the new sensor and the powerful noise reduction provided by the Dual **DiG!C 5+** Image Processors, the EOS-1D X can shoot at expanded sensitivities down to ISO 50 (L) and up to 102400 (H1), and even 204800 (H2)! Beyond the obvious advantages of its wide ISO range, the EOS-1D X has a several automatic ISO settings, found on the dedicated ISO menu. Minimum and maximum ISO settings can be specified, as can a user-defined range, plus full auto and manual.

61-Point High Density Reticular AF

The EOS-1D X marks a decisive step forward in AF technology and performance. It has a newly designed 61-Point High Density Reticular AF featuring an Offset Array Sensor that delivers exceptional focal accuracy in more situations than ever before. It offers multi-zone wide area AF for better tracking, has 5 central dual cross-type points (f/2.8 diagonal), 21 central cross-type points (f/5.6 horizontal & vertical) and 20 outer cross-type points (f/4.0 horizontal), and is remarkably sensitive in low-light situations (EV-2 for a central point with a f/2.8 lens).



The AF unit itself is designed to perform flawlessly even in adverse conditions, with secondary imaging lenses that use temperature- and humidity-resistant glass molding. Combined with the EOS-1D X's quick return mirror mechanism, the AF sensor is reliably stable, every time.

To complement the sophisticated improvements to the EOS-1D X's AF system, the camera has a system-first dedicated AF menu tab, so AF can be controlled without having to go through custom function menus. There are 6 AF point selection methods (spot, single point, single point and adjacent 4 points, single point and adjacent 8 points, zone selection and full automatic), plus a dedicated AF configuration tool for control of AI Servo AF tracking parameters.

EOS iTR AF

With help from the EOS-1D X's new 100,000-pixel RGB Metering sensor, subject identification and tracking is significantly more reliable than with previous models. EOS iTR (Intelligent Tracking and Recognition) AF allows for subject recognition based on color and face detection. These improvements are evident in tracking movements that were previously too unpredictable to follow. With acceleration and deceleration tracking, the EOS-1D X's AI Servo AF system can adjust response and react to sudden stops and starts, perfect especially for sports and wildlife photography. Specific parameters can be adjusted and refined and saved in the AF menu for later use.

New AF and AE systems deliver significant improvement in subject identification and tracking.

12 fps High-Speed Continuous Shooting

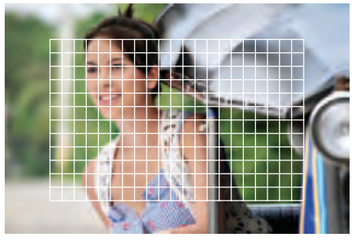
The EOS-1D X combines fast 16-channel data readout from its 18.1 Megapixel CMOS sensor and the supercharged processing capabilities of its Dual **DiG!C 5+** Image Processors with a speedier shutter and mirror system to raise the performance bar for EOS DSLR cameras, all while capturing images full-frame. Ideal for fixed focus situations, the EOS-1D X's super-high-speed mode enables high-speed shooting up to 14 fps (JPEG).

Improved Shutter-Release Time Lag

Thanks to a non-contact charge and more resilient design, shutter lag with the EOS-1D X is reduced to 0.055 sec. A redesigned mirror that features a Quad Active Mirror Stopper not only aids in speedy shot-to-shot times, but the reduced mirror vibration means more stable shots at all times.

EOS iSA System with Dedicated DiG!C 4

The EOS-1D X features a brand new 100,000-pixel RGB Metering Sensor with a dedicated **DiG!C 4** Image Processor that delivers substantial improvements in evaluative ambient and flash metering. The sensor uses 252 metering zones for general metering, and 35 zones in low light. The meter's **DiG!C 4** Image Processor is the heart of the EOS iSA (Intelligent Subject Analysis) System that incorporates face and color recognition data for more stable performance under rapidly changing lighting situations that can result in inaccurate exposure. E-TTL Flash metering gains the same improvements.



100,000-pixel RGB Metering System *— The new auto exposure system uses a dedicated 100,000-pixel sensor with 252 zones for metering. The dedicated DIGIC 4 processor improves subject recognition, providing proper exposure even with difficult lighting conditions.*

EOS Full HD Video

Addressing the requests of the pros, the EOS-1D X captures HD video with a new level of sophistication for a DSLR camera. It offers both ALL-I intraframe and IPB Interframe compression, has High Profile support for high bit-rate processing, and automatically splits files greater than 4GB (FAT specifications) without interruption. It offers the option of timecoding at all times (Free Run) or only during recording (Rec Run), useful for multi-camera shots. It also features improved sound recording adjustment capabilities, offering 64-step volume control accessible through the quick settings screen during video shooting. The EOS-1D X even features new sensor technologies that significantly increase image processor performance, reducing color artifacts and moiré, a significant problem in video scenes with vertical lines.

Dual Card Slots

To complement the high-speed drive and record the maximum number of shots as quickly as possible, the EOS-1D X records solely to industry speed-leading CompactFlash cards and features a Dual Card Slots. Supporting UDMA mode 7, with a maximum data transfer rate of 167 MB/s as well as exFAT maximum file sizes, the EOS-1D X can use Type I and Type II CF recording media. Three recording settings are available: Auto switch, wherein the camera automatically switches from one card to another when the first is filled, Record Separately, where the same image is recorded to each card, but in different size or file type, or Record to Multiple, where the same image is saved to both cards in the same size (or sizes). Additionally, images can easily be transferred from one CF card to the other.

Dual-Axis Electronic Level

The EOS-1D X features Canon's brilliant Dual Axis Electronic Level display, which aids in achieving perfect orientation in every shot. Visible in either the viewfinder or the camera's LCD monitor in both Live View or as a standalone and capable of displaying both roll and pitch in 1-degree increments, the Dual Axis Electronic Level is invaluable for architecture, macro photography, video, or any situation where critical composition is important.

Durability

For professionals who demand nothing less than the best, EOS-1D X is designed to perform superbly, even in the most demanding situations, every time. The body is constructed of rigid, high-strength magnesium-alloy for rugged performance and features a new grip design for easier finger placement and reduced hand fatigue. Its newly redesigned shutter has lightweight carbon-fiber blades, and is rated to maintain up to 14 fps performance without compromise, for up to 400,000 cycles. The EOS-1D X and accessories like the new WFT-E6A and GPS Receiver GP-E1 have reinforced exterior coatings for improved dust and water resistance, even at their connection points. A new dust removal system uses two vibrating elements that free and remove smaller dust particles far more effectively than previous systems. As part of Canon's Integrated Cleaning System, dust missed by the camera can be identified and removed using the Dust Delete Data feature of Canon's Digital Photo Pro software, bundled with every EOS DSLR.

Enhanced Front and Rear Button Layout and Customization

The EOS-1D X represents a new standard in ergonomic construction and customization for EOS DSLR cameras. With a refined and intelligent layout of all control buttons and dials, shooting settings can be made with just the right hand, and quick image check and image processing operations with just the left. New, assignable and tactile function buttons located on the front of the camera enable fast access to features the photographer uses frequently. The vertical-position grip has been

redesigned for comfort and familiarity, and combined with a vertical position Multi-controller, Mfn2 and Depth-of-Field preview buttons provides every option found with horizontal shooting for uninterrupted, intuitive shooting no matter the camera's orientation.

Intelligent Viewfinder

The EOS-1D X's Intelligent Viewfinder offers a sharp, bright 100% field of view with an approximate magnification of .76x and a 20mm eye-point and, with a new construction featuring aspherical lens elements, displays less distortions and color aberrations than previous models. It uses a transparent LCD to superimpose a customizable combination of focus points and gridlines directly over the image. The AF status indicator can even be directed to display within or outside of the viewfinder's image area. With the Intelligent Viewfinder, unlike with other cameras, the photographer has the choice of seeing shooting information or looking only at the scene in front of the camera. The ability to effectively erase all shooting data and turn it back on with the touch of a button gives the photographer the opportunity to concentrate simply on seeing and composing the photograph without distraction, a great advantage in numerous shooting situations.

Quick Control Button

During shooting, the EOS-1D X's dedicated Quick Control button enables speedy changes of nearly every shooting parameter with the touch of a button. During playback, pressing the Quick Control button enables the photographer to protect images, rotate, rate, resize, view highlight alert, AF point and much more.

Improved GUI / Menu System

Reconceived based on the experience and feedback of professional users, the EOS-1D X's new Graphic User Interface is faster, more precise and more intuitive than ever. The menu structure has been redesigned so that frequently used functions previously buried in the menu hierarchy are brought to the front. Operations previously assigned to buttons, controls, menus and custom functions have been consolidated for quick access in the menu, ensuring the photographer can concentrate on shooting images with the knowledge that the camera's settings are just right. With the EOS-1D X's new Multi Electronic Lock, the Main Dial, Quick Control Dial and Multi-Controller can all be locked, individually or together. Meanwhile, the camera offers operational help through the press of the Info button, identifying features quickly, instructing on their use and minimizing confusion, even for photographers operating the camera for the first time.

In-camera Image Processing

Post processing, in-camera, is both quick and easy with the EOS-1D X. The EOS-1D X offers in-camera RAW processing with image correction like white balance, brightness, picture style and more, as well as image resizing with JPEG images. Additionally, the EOS-1D X features Expanded Quick Control functions during playback like image protect, image rotate, rating, RAW image processing, resize, highlight alert, AF point and image jump, meaning a streamlined workflow can begin in the field.

Chromatic Aberration Correction

The EOS 1D X's Chromatic Aberration Correction feature corrects aberrations in Canon lenses at the time of shooting. Data based on the optical characteristics of each lens can be read by the camera, and individual lenses of the same model can be registered by serial number.

ON

OFF

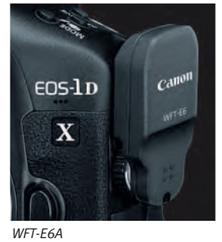
Correction of lens chromatic aberration can be applied automatically as you shoot and results in sharper, cleaner images.

LCD Monitor and Improved Playback Features

The EOS-1D X's 3.2" TFT LCD monitor has 1,040,000 dots, anti-reflective construction and features Canon's Clear View II technology for bright, sharp display in any number of shooting situations. It's ideal for reviewing settings and images, as well as for shooting in Live View mode. In Live View, grid lines can be displayed in 9 sections, 24 sections, or 9 sections with diagonals, as can the dual-axis electronic level. For image review, the EOS-1D X has a new dedicated Magnify/Reduce button. While pressing the button, zooming in or out (up to 10x) is achieved simply by turning the Main Dial. Images can be protected or erased quickly, individually or in batches, and slideshows can be created with some or all images and can be sequenced by date, folders, movies, stills or rating.

Wireless File Transmitter

The EOS-1D X is compatible with the new WFT-E6A* for wireless LAN and Bluetooth transfer with the IEEE 802.11 a/b/g/n standards, performing up to 2.5x faster than previous models. The EOS-1D X's new image resend feature ensures that all images get transferred, even if wireless signal drops interrupt the transmission. The small and lightweight WFT-E6A is discrete, does not interfere with other camera operations, and maintains the EOS-1D X's high level of dust and drip resistance.



WFT-E6A

Accessory Support

The GPS Receiver GP-E1* attaches to the EOS-1D X, offering the same dust and waterproof protection as the camera body itself, features its own power supply and is always ready to append location data to images. It records latitude, longitude/elevation and UTC time, and features GPS Time Sync Function and an electronic compass that records the camera's orientation when shooting.

** This device has not been authorized as required by the rules of the Federal Communications Commission. This device is not, and may not be offered for sale or lease, or sold or leased,until authorization is obtained.*

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EOS-1Ds Mark III

Digital Capture Redefined.

The EOS-1Ds Mark III has been designed to capture exquisitely detailed images for those who demand it. This professional powerhouse camera features a full-frame 21.1 Megapixel CMOS sensor for high-resolution image capture, Dual "DIGIC III" Image Processors for speedy performance and a host of technologies designed to capture phenomenal images quickly and without compromise. With strong construction complementing the ultimate combination of power, speed and resolution, the EOS-1Ds Mark III is suited for your professional needs.

21.1 MEGA PIXELS CMOS · DiGiC III · FULL FRAME CMOS · Picture Style · 5 Frames Per Sec · LiveView MODE · EOS Integrated Cleaning System · 3.0" LCD · DIRECT PRINT · PictBridge · HI-SPEED USB

EOS-1D Mark IV

Professional, Rugged & Powerful.

Offering a comprehensive combination of speed, accuracy and image quality, the EOS-1D Mark IV is a superb choice for the professional photographer or videographer. Featuring a 16.1 Megapixel APS-H sized CMOS sensor, an advanced 45-point AF system with AI Servo II AF tracking algorithm, 10 fps capture, boosted ISO sensitivities with exceptionally low noise, a versatile EOS Full HD video capture mode and much more, the EOS-1D Mark IV is capable of doing more things, in more places. This professional camera offers performance that's nothing short of stunning.

16.1 MEGA PIXELS CMOS · DIGIC 4 · Picture Style · FULL HD 1080 · 10 Frames Per Sec · LiveView MODE · EOS Integrated Cleaning System · 3.0" LCD ClearView II · DIRECT PRINT · PictBridge · HI-SPEED USB

©Stephen Frink

EOS 5D Mark II

High Performance for High Expectations.

For phenomenal full-frame performance in a compact and easy to use digital SLR, look no further than the brilliant EOS 5D Mark II. Featuring the ability to capture video in Full HD with its large full-frame CMOS sensor, it is an exciting tool not just for photographers, but also for videographers and cinematographers as well. It has a 21.1 Megapixel Canon CMOS sensor, a **DiG!C 4** Image Processor for speed, offers an extended ISO range and Live View shooting. Whether in the hands of a wedding photographer, capturing breathtaking landscapes, on a movie set, or anywhere in between, the EOS 5D Mark II helps bring photographic brilliance.

21.1 MEGA PIXELS CMOS · DIGIC 4 · FULL FRAME CMOS · FULL HD 1080 · Picture Style · 3.9 Frames Per Sec · LiveView MODE · EOS Integrated Cleaning System · 3.0" LCD · DIRECT PRINT · PictBridge · HI-SPEED USB

EOS 7D

Beyond the Still.

With a host of phenomenal features designed to enhance and speed up every facet of the photographic and moviemaking process, the cutting-edge EOS 7D represents the next level of photographic and filmmaking performance. With its 18.0 Megapixel CMOS sensor and Dual **DiG!C 4** Image Processors, it shoots amazing stills and Full HD video without compromise. It has a bright and customizable Intelligent Viewfinder with approximately 100% coverage, a newly enhanced AF system, plus rugged, refined construction for reliable pro-level performance anywhere, any time.

18.0 MEGA PIXELS CMOS · DIGIC 4 · All Cross-type 19-point AF · Intelligent Viewfinder · FULL HD 1080 · 8.0 Frames Per Sec · 63 ZONE Dual-Layer Metering · ISO 6400 · LiveView MODE · EOS Integrated Cleaning System · 3.0" LCD ClearView II · Picture Style · DIRECT PRINT · PictBridge · HI-SPEED USB

EOS 60D

An EOS with Perspective.

For photographers and enthusiasts looking for a camera with the perfect combination of versatility, performance and ease-of-use, Canon has introduced the EOS 60D. Featuring a brilliant Canon 18.0 Megapixel CMOS sensor, a **DiG!C 4** Image Processor, a Vari-angle 3.0-inch Clear View LCD monitor with 180° rotation — perfect for self-portraits — plus a host of features inspired by Canon professional EOS DSLRs, the EOS 60D is powerful, compact and lightweight, perfect for a day of shooting. It offers 5.3 fps maximum performance, Full HD video, a flash sync of 1/250 sec, and a shutter that's durability tested to 100,000 cycles. It features a horizontal Electronic Level display, accepts interchangeable focus screens and has a number of exciting in-camera functions. With all this and more, the EOS 60D offers a powerful image-capturing perspective.

18.0 MEGA PIXELS CMOS · DiGiC 4 · ISO 6400 · 63 ZONE Dual-Layer Metering · FULL HD 1080 · Vari angle LCD · 3:2 WIDE 3.0" LCD · LiveView MODE · 5.3 Frames Per Sec · EOS Integrated Cleaning System · Picture Style · 96% Viewfinder · RAW + JPEG In-Camera RAW processing · DIRECT PRINT · PictBridge · Hi-Speed USB

EOS REBEL T3i

The REBEL on the Move.

Photographers looking for an easy-to-use camera that will help them create their next masterpiece need look no further than the Canon EOS Rebel T3i. The next in a long line of phenomenal compact DSLRs, the EOS Rebel T3i continues the Rebel tradition of easy operation, compact design and no-compromise performance. Featuring Canon's **DiG!C 4** Image Processor and an 18.0 Megapixel CMOS sensor – plus cutting-edge technologies like a Vari-angle 3.0" LCD monitor, Full HD 1080p video recording, Live View shooting and Wireless flash photography – the Rebel T3i offers the best of EOS photography in a compact package.

18.0 MEGA PIXELS CMOS · DiGiC 4 · ISO 6400 · 63 ZONE Dual-Layer Metering · FULL HD 1080 · Vari angle LCD · 3:2 WIDE 3.0" LCD · Scene Intelligent Auto · LiveView MODE · 3.7 Frames Per Sec · EOS Integrated Cleaning System · Picture Style · SDXC · DIRECT PRINT · PictBridge

EOS REBEL T2i

The Evolution Continues.

Combining classic Canon technologies with true versatility, the EOS Rebel T2i is an easy-to-use, lightweight DSLR that's a joy to have, featuring a class-leading 18.0 Megapixel CMOS Sensor and improved EOS Movie mode with manual exposure control, expanded recording options and a Movie Crop function. With increased light sensitivity for low-light photography and the speed to capture up to 3.7 frames per second, the EOS Rebel T2i is ready to go the minute it's picked up. Gorgeous photos and Full HD videos are as simple as the press of a button.

18.0 MEGA PIXELS CMOS · DIGIC 4 · ISO 6400 · 63 ZONE Dual-Layer Metering · FULL HD 1080 · Movie Crop · 3:2 WIDE 3.0" LCD Monitor · LiveView MODE · 3.7 Frames Per Sec · EOS Integrated Cleaning System · Picture Style · DIRECT PRINT · PictBridge · HI-SPEED USB

EOS REBEL T3

The Beauty of Simplicity.

Perfect for photographers ready to make the move to digital SLR photography, the EOS Rebel T3 delivers beautiful photos and video, speed, simplicity and fun. It features a 12.2 Megapixel CMOS Image Sensor and Canon **DiG!C 4** Image Processor for richly detailed images and quick camera response. It has Canon's amazing 63-zone, Dual-layer metering for accurate exposures and features Canon's Basic+ function, HD video recording and Live View shooting. Innovative features, such as an on-screen Feature Guide and Quick Control screen, help the photographer use the camera's advanced capabilities to capture spectacular images.

12.2 MEGA PIXELS CMOS · DIGIC 4 · HD · ISO 6400 · 63 ZONE Dual-Layer Metering · 2.7" LCD · LiveView MODE · 3 Frames Per Sec · Picture Style · DIRECT PRINT · PictBridge

EOS SLR Comparison Chart

	EOS-1D X	EOS-1Ds Mark III	EOS-1D Mark IV	EOS 5D Mark II	EOS 7D	EOS 60D	EOS Rebel T3i	EOS Rebel T2i	EOS Rebel T3
Autofocus System	61-Point High Density Reticular AF with Offset Array Sensor; TTL-AREA-SIR AF-dedicated CMOS Sensor with 41 cross-type points (lens dependant) One-Shot and AI Servo AF III with EOS iTR AF; Manual focusing confirmation possible with EF lenses; Automatic or manual focus point selection	TTL-AREA-SIR CMOS Sensor; One-Shot and AI Servo AF with Focus Prediction; Manual focusing confirmation possible with EF lenses; Automatic or manual focus point selection	TTL-AREA-SIR CMOS Sensor with 39 high-precision cross-type points; One-Shot and AI Servo II AF with Focus Prediction; Manual focusing confirmation possible with EF lenses; Automatic or manual focus point selection	TTL-CT-SIR CMOS Sensor (only the center point is cross-type); One-Shot and AI Servo AF with Focus Prediction; Manual focusing confirmation possible with EF lenses; Automatic or manual focus point selection	TTL-CT-SIR CMOS Sensor; One-Shot and AI Servo II AF with Focus Prediction; Manual focusing confirmation possible With EF lenses; Automatic or manual focus point selection	TTL-CT-SIR AF-dedicated CMOS sensor; One-Shot and AI Servo AF with Focus Prediction; Manual focusing confirmation possible with EF and EF-S Lenses; Automatic or manual focus point selection	TTL-CT-SIR AF CMOS Sensor (only the center point is cross-type); One-Shot and AI Servo with Focus Prediction; AI Focus AF; Manual focusing confirmation possible with EF and EF-S lenses; Automatic or manual point selection	TTL-CT-SIR AF CMOS Sensor;One-Shot and AI Servo AF with Focus Prediction; Manual focusing confirmation possible with EF and EF-S lenses; Automatic or manual focus point selection	TTL-CT-SIR AF CMOS Sensor (only the center point is cross-type); One-Shot and AI Servo with Focus Prediction; AI Focus AF; Manual focusing confirmation possible with EF and EF-S lenses; Automatic or manual point selection
Image Processor / Image Sensor	Dual DIGIC 5+ / 36 x 24 mm, Single-plate CMOS Sensor with Ultrasonic Wave Motion Cleaning	Dual "DIGIC III" / 36 x 24mm, Single-plate CMOS Sensor with Auto Sensor Cleaning	Dual DIGIC 4 / 27.9 x 18.6mm, single-plate CMOS Sensor with Auto Sensor Cleaning	DIGIC 4 / 36.0 x 24.0mm, Single-plate CMOS Sensor with Auto Sensor Cleaning	Dual DIGIC 4 / 22.3 x 14.9mm, single-plate CMOS Sensor with Auto Sensor Cleaning	DIGIC 4 / 22.3 x 14.9mm single-plate CMOS Sensor with Auto Sensor Cleaning	DIGIC 4 / 22.3 x 14.9mm single plate CMOS Sensor with Auto Sensor Cleaning	DIGIC 4 / 22.3 x 14.9mm, single-plate CMOS Sensor with Auto Sensor Cleaning	DIGIC 4 / 22.0 x 14.7mm single plate CMOS Sensor
Crop Factor	1.0x (Full-frame)	1.0x (Full-frame)	1.3x (APS-H)	1.0x (full-frame)	1.6x (APS-C)	1.6x (APS-C)	1.6x (APS-C)	1.6x (APS-C)	1.6x (APS-C)
Special Features	• 18.1 Megapixel CMOS DSLR camera • Built-in 3.2" (approx. 1,040,000 dots) wide viewing angle color monitor • 31 Custom functions in 6 sets • 2 Multi-controllers • Simultaneous RAW and JPEG image capture • Multiple Exposures (4 modes) • Dioptric adjustment • Depth-of-field preview • FE lock • Mirror lock • In-camera RAW processing • Star rating system • USB 2.0 Hi-Speed compatible • Magnesium-alloy body • Picture Style • Dust reduction feature • Live View Function & Face Detection Live mode • Full HD Video • Timecode • Intelligent Viewfinder • Lens aberration correction	• 21.1 Megapixel CMOS DSLR camera • Built-in 3.0" (approx. 230,000 dots) wide viewing angle color monitor • 57 Custom functions in 4 sets • Quick Control Dial • Simultaneous RAW and JPEG image capture • Dioptric adjustment • Depth-of-field preview • FE lock • Mirror lock • N3 remote control socket • USB compatible • Magnesium-alloy body • Picture Style • Dust reduction feature • Live View Function	• 16.1 Megapixel CMOS DSLR camera • Built-in 3.0" (approx. 920,000 dots) wide viewing angle color monitor • 57 Custom functions in 4 sets • Multi-controller • Simultaneous RAW and JPEG image capture • Dioptric adjustment • Depth-of-field preview • FE lock • Mirror lock • USB 2.0 Hi-Speed compatible • Magnesium-alloy body • Picture Style • Dust reduction feature • Live View Function & Face Detection Live mode • Full HD Video	• 21.1 Megapixel CMOS DSLR camera • Built-in 3.0" (approx. 920,000 dots) wide viewing angle color monitor • 25 Custom functions with 71 settings • Multi-controller • Simultaneous RAW and JPEG image capture • Dioptric adjustment • Depth-of-field preview • FE lock • Mirror lock • N3 remote control socket • USB 2.0 Hi-Speed compatible • Magnesium-alloy body • Picture Style • Dust reduction feature • Live View Function & Face Detection Live mode • Full HD Video	• 18.0 Megapixel CMOS digital SLR camera • Built-in 3.0" (approx.920,000 dots) wide viewing angle color monitor • Dual Axis Electronic Level • Simultaneous RAW and JPEG image capture • Dioptric adjustment • Depth-of-field preview • Intelligent Viewfinder Display • FE lock • Mirror lock • Retractable built-in E-TTL II flash, with integrated Speedlite transmitter and manual output control • USB 2.0 Hi-Speed compatible • Magnesium alloy body • Picture Style • Dust Reduction Feature • Live View Function & Face Detection Live mode • Full HD video	• 18.0 Megapixel CMOS DSLR camera • Built-in 3-inch (approx. 1,040,000 dots) wide Vari-angle color monitor • 20 Custom Functions in 4 Groups • Multi-controller • Horizontal Level • Simultaneous RAW + JPEG image capture • Dioptric adjustment • Depth-of-field preview • FE Lock • Mirror Lock • Retractable built-in E-TTL II flash • Integrated Speedlite transmitter • Basic+ • Movie Crop • In-camera RAW processing • Creative filters • Star rating system • Aluminum and polycarbonate with glass fiber chassis • USB 2.0 Hi-Speed compatible • Picture Style • Dust Reduction Feature • Live View Function & Face Detection Live mode • Full HD video	• 18.0 Megapixel CMOS Sensor • Built-in, 3.0" (approx. 1,040,000) wide Vari-angle color monitor • 11 custom functions with 34 settings • Simultaneous RAW + JPEG image capture • USB 2.0 Hi-Speed compatible • FE Lock • Mirror Lock • Feature Guide • Basic+ • Peripheral Illumination Correction • Creative Filters • EOS Scene Detection Technology, Scene Intelligent Auto and Picture Style Auto • Multiple Aspect Ratios • Movie Digital Zoom • Video Snapshot albums • Built-in flash with Speedlite transmitter • Full HD Video	• 18.0 Megapixel CMOS DSLR camera • Built-in 3.0" (Approx. 1,040,000 dots) wide viewing angle color monitor • 12 Custom functions • Simultaneous RAW and JPEG image capture • Dioptric adjustment • Depth-of-field preview • FE lock • Mirror lock • Retractable built-in E-TTL II flash • USB 2.0 Hi-Speed compatible • Picture Style • Dust Reduction Feature • Live View Function & Face Detection Live Mode • Full HD video • Basic+ • Peripheral Illumination Correction • Hybrid Single Blade Shutter • HD Video Shooting	• 12.2 Megapixel CMOS Sensor • Built-in, 2.7" (approx. 230,000) color monitor • 10 custom functions with 32 settings • Simultaneous RAW + JPEG recording • USB 2.0 Hi-Speed compatible • FE Lock • Feature Guide • Basic+ • Peripheral Illumination Correction • Hybrid Single Blade Shutter • HD Video Shooting • Slide Show • Ratings
Video Recording Size	1920 x 1080 (Full HD): 30p (29.97) / 25p / 24p (23.976), 1280 x 720 (HD): 60p (59.94) / 50p; 640 x 480 (SD): 30p (29.97) / 25p.	–	1920 x 1080 (Full HD): 30p (29.97) / 25p / 24p (23.976), 1280 x 720 (HD): 60p (59.94) / 50p; 640 x 480 (SD): 60p (59.94) / 50p.	1920 x 1080 (Full HD): 30p, 640 x 480 (SD): 30p	1920 x 1080 (Full HD): 30p (29.97), 25p/ 24p (23.976) / 1280 x 720 (HD): 60p (59.94) / 50p, 640 x 480 (SD): 60p (59.94) / 50p	1920x1080 (Full HD): 30p / 25p / 24p, 1280x720: 60p / 50p, 640x480 (Movie Crop): 60p /50p	1920 x 1080 (Full HD): 30p (29.97) / 24p (23.976) / 25p, 1280 x 720 (HD): 60p (59.94) / 50p, 640 x 480 (SD): 30p (29.97) / 25p	1920 x 1080 (Full HD): 30p (29.97) / 24p (23.976) / 25p, 1280 x 720(HD): 60p (59.94) / 50p, 640 x 480 (SD and SD Movie Crop Function): 60p (59.94) / 50p	1280 x 720: 30p (29.97), 25p
Number of Focusing Points	61 (Area AF Ellipse); 61 points selectable, 41 cross-type points (lens dependant) 5 diagonal cross type points; improved AI Servo AF III	45 (Area AF Ellipse) 19 cross-type AF points (plus 26 Assist AF points)	45 (Area AF Ellipse); All 45 points selectable, 39 cross-type, high-precision AF points (manual), 19 (automatic), improved AI Servo II AF	9 (plus 6 Assist AF points) Center AF point is cross-type Hybrid high and standard precision	19; Each AF point has a cross-type sensor. Center AF point is dual-diagonal high-precision cross-type sensor with f/2.8.	9; Each AF point has cross-type sensors — Center AF point also has additional, high-precision dual cross-type sensor with f/2.8 or faster lenses	9; Center AF point is a high precision cross-type, vertical-line sensitive at f/2.8.)	9; each AF point has a cross type sensor; cross-type at center compatible with sensor with f/2.8	9; Center AF point is cross-type, vertical-line sensitive at f/5.6.)
ISO Range*	ISO 100–51200, ISO 50, 102400, & 204800 via Custom Function	ISO 100–1600, ISO 50 and 3200 via Menu Selection	ISO 100–12800, ISO 25600, 51200, & 102400 via Custom Function	ISO 100–6400, ISO 50, 12800 and 25600 via Menu Selection	ISO 100-6400, ISO 12800 via Custom Function	ISO 100 – 6400 and 12800 via Custom Function	100-6400, ISO 12800 via Custom Function	100-6400, ISO 12800 via Custom Function	100-6400
Recording Media	2 ea. UDMA CF/CF card (Type I or II) memory card	UDMA CF/CF card (Type I or II), SD/SDHC** memory card	UDMA CF/CF card (Type I or II), SD/SDHC memory card	UDMA CF/CF card (Type I or II)	UDMA CF/CF card (Type I or II)	SD card, SDHC card or SDXC memory card	SD, SDHC, SDXC memory card	SD/SDHC/SDXC memory card	SD/SDHC/SDXC memory card
Frames Per Second	Single, 12 fps, 3 fps, 14 fps Super High Speed Mode	Single, 3.0 fps, 5.0 fps	Single, 10.0 fps, 3 fps	Single, 3.9 fps	Single, 8.0 fps, 3 fps	Single, 5.3 fps, 3 fps	Single and 3.7 fps	Single and 3.7 fps	Single and 3.0 fps
Shutter Speeds	30-1/8,000 sec. & Bulb; manually settable in 1/3-, 1/2-, 1-stop increments	30–1/8000 sec. & Bulb; manually settable in 1/3-, 1/2-, 1-stop increments	30–1/8,000 sec. & Bulb; manually settable in 1/3-, 1/2-, 1-stop increments	30–1/8000 sec. & Bulb; manually settable in 1/3-, 1/2-stop increments	30–1/8,000 sec. & Bulb; manually settable in 1/3- or 1/2-stop increments	30 to 1/8000 sec. & Bulb; manually settable in 1/3- or 1/2-stop increments	30-1/4,000 sec. & Bulb, manually settable in 1/3- or 1/2-stop increments	30-1/4,000 sec. & Bulb, manually settable in 1/3- or 1/2-stop increments	30-1/4,000 sec. & Bulb, manually settable in 1/3- or 1/2-stop increments
Autofocus Sensitivity	EV -2 to 20 (at ISO 100 with f/1.4 lens)	EV –1–18 (at ISO 100)	EV –1–18 (at ISO 100 with f/1.4 lens)	EV -0.5–18 (at ISO 100)	EV -0.5–18 (at ISO 100)	EV -0.5 – 18 (at ISO 100)	EV -0.5 – 18 (at ISO 100)	EV -0.5–18 (at ISO 100)	EV 0 – 18 (at ISO 100)
Autofocus Auxiliary Light Built-in	–	–	–	–	Yes (via built-in flash)	Yes (via built-in flash)	Yes (via built-in flash)	Yes (via built-in flash)	Yes (via built-in flash)
Shutter	Vertical-travel, focal-plane shutter with soft-touch electromagnetic release, all speeds electronically controlled	Vertical-travel, focal-plane shutter with soft-touch electromagnetic release, all speeds electronically controlled	Vertical-travel, focal-plane shutter with soft-touch electromagnetic release, all speeds electronically controlled	Vertical-travel, mechanical, focal-plane shutter with soft-touch electromagnetic release, all speeds electronically controlled	Vertical-travel, focal-plane shutter with soft-touch electromagnetic release, all speeds electronically controlled	Vertical-travel, mechanical, soft-touch electromagnetic release, focal-plane shutter with all speeds electronically-controlled	Vertical-travel, mechanical, focal-plane shutter with all speeds electronically controlled	Vertical-travel, mechanical, focal-plane shutter with all speeds electronically-controlled	Vertical-travel, mechanical, focal-plane shutter with all speeds electronically-controlled
Maximum Flash Synchronization Speed	Up to 1/250 sec.; high-speed sync. Available with EX-series Speedlites	Up to 1/250 sec.; high-speed sync. available with EX-series Speedlites	Up to 1/300 sec.; high-speed sync. Available with EX-series Speedlites	Up to 1/200 sec.; high-speed sync. available with EX-series Speedlites	Up to 1/250 sec.; high-speed sync. Available with EX-series Speedlites	Up to 1/250 sec.; high-speed sync. Available with EX-series Speedlites	Up to 1/200 sec.; high-speed sync. available with EX-series Speedlites	Up to 1/200 sec., high-speed sync. Available with EX-series Speedlites	Up to 1/200 sec.; high-speed sync. available with EX-series Speedlites
Metering System	TTL full-aperture metering: • 252-zone evaluative metering • TBA% Partial metering • TBA % Spot metering (linked to user-selected focusing point) • Multi-spot metering (up to 8 spot readings) • Center-Weighted average metering • Pre-flash metering (E-TTL II)	TTL full-aperture metering: • 63-zone Evaluative metering • 8.5% Partial metering • 2.4% Center spot metering • 2.4% Spot metering (linked to user-selected focusing point) • Multi-spot metering (up to 8 spot readings) • Center-Weighted average metering • Pre-flash metering (E-TTL II)	TTL full-aperture metering: • 63-zone evaluative metering • 13.5% Partial metering • 3.8% Center spot metering • 3.8% Spot metering (linked to user-selected focusing point) • Multi-spot metering (up to 8 spot readings) • Center-Weighted average metering • Pre-flash metering (E-TTL II)	TTL full-aperture metering: • 35-zone Evaluative metering • 8% Partial metering • 3.5% Center spot metering • Center-Weighted average metering • Pre-flash metering (E-TTL II)	TTL full-aperture metering: • 63-zone Evaluative metering • 9.4% Partial metering • 2.3% Center spot metering • Center-Weighted average metering • Pre-flash metering (E-TTL II)	TTL full-aperture metering • 63-zone Evaluative metering • 6.5% Partial metering • 2.8% Center spot metering • Center-Weighted average metering	TTL full-aperture metering: • 63-zone Evaluative metering • 9% Partial metering • 4% Spot metering • Center-Weighted average • metering • Pre-flash metering (E-TTL II)	TTL full-aperture metering: • 63-zone Evaluative metering • 9% Partial metering • 4% Center spot metering • Center-Weighted average metering • Pre-flash metering (E-TTL II)	TTL full-aperture metering: • 63-zone Evaluative metering • Approx. 10% Partial metering • Center-Weighted average metering • Pre-flash metering (E-TTL II)
Metering Sensitivity	EV 0–20 for all patterns (at ISO 100 with f/1.4 lens)	EV 0–20 for all patterns (at ISO 100 with f/1.4 lens)	EV 0–20 for all patterns (at ISO 100 with f/1.4 lens)	EV 1–20 for all patterns (at ISO 100 with f/1.4 lens)	EV 1-20 for all patterns (at ISO 100 with f/1.4 lens)	EV 0 – 20 for all patterns (at ISO 100 with f/1.4 lens)	EV 1 - 20 (at ISO 100 with f/1.4 lens)	EV 1-20 for all patterns (at ISO 100 with f/1.4 lens)	EV 0 - 20 (at ISO 100 with f/1.4 lens)
Exposure Compensation	±5 stops in 1/3- or 1/2-stop increments	±3 stops in 1/3- or 1/2-stop increments	±3 stops in 1/3- or 1/2-stop increments	±2 stops in 1/3- or 1/2-stop increments	±5 stops in 1/3- or 1/2-stop increments	±5 stops in 1/3- or 1/2-stop increments	±5 stops in 1/3- or 1/2-stop increments	±5 stops in 1/3- or 1/2-stop increments	±5 stops in 1/3- or 1/2-stop increments
Flash Exposure Compensation	±3 stops in 1/3- or 1/2-stop increments	±3 stops in 1/3- or 1/2-stop increments	±3 stops in 1/3- or 1/2-stop increments	±2 stops in 1/3- or 1/2-stop increments	±3 stops in 1/3- or 1/2-stop increments	±3 stops in 1/3- or 1/2-stop increments	Up to ±2 stops in 1/3- or 1/2-stop increments	±3 stops in 1/3- or 1/2-stop increments	Up to ±2 stops in 1/3- or 1/2-stop increments
AE Lock	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Exposure Modes	• Shutter Speed-priority AE • Aperture-priority AE • Program AE (shiftable) • Manual • E-TTL II Flash AE • Bulb	• Shutter Speed-priority AE • Aperture-priority AE • Program AE (shiftable) • Manual • E-TTL II Flash AE • Flash Metered Manual • Bulb	• Shutter Speed-priority AE • Aperture-priority AE • Program AE (shiftable) • Manual • E-TTL II Flash AE • Bulb	• Program AE (shiftable) • Shutter Speed-priority AE • Aperture-priority AE • Creative Auto • Full Auto • Manual • E-TTL II Flash AE • Bulb	• Program AE (shiftable) • Shutter Speed-priority AE • Aperture-priority AE • Depth-of-field AE • Full Auto • Creative Auto • Manual • E-TTL II Flash AE • Bulb	• Program AE (shiftable) • Shutter-priority AE • Aperture-priority AE • Manual exposure • Bulb • Full Auto • Flash Off • Creative Auto • Programmed Image Control modes (5) • E-TTL II Autoflash Program AE	• Program AE • Shutter-priority AE • Aperture-priority AE • Manual exposure • Automatic depth-of-field AE • Scene Intelligent Auto • Flash Off • Creative Auto • Programmed AE with ambi-ence selection • E-TTL II autoflash program AE	• Program AE • Shutter Speed-priority AE • Aperture-priority AE • Depth-of-Field AE • Full Auto • Manual • E-TTL II autoflash AE • 6 PIC (Programmed Image Control) modes • Bulb	• Program AE • Shutter-priority AE • Aperture-priority AE • Manual exposure • Automatic depth-of-field AE • Full Auto • Flash Off • Creative Auto • Programmed AE with ambience selection • E-TTL II autoflash program AE
Viewfinder	Fixed eye-level pentaprism	Fixed eye-level pentaprism	Fixed eye-level pentaprism	Fixed eye-level pentaprism	Fixed eye-level pentaprism	Fixed eye-level pentamirror	Fixed eye-level pentamirror	Fixed eye-level pentamirror	Fixed eye-level pentamirror
Viewfinder Coverage	Approx. 100% horizontal and vertical at 0.76x	Approx. 100% horizontal and vertical at 0.75x	Approx. 100% horizontal and vertical at 0.76x	98% horizontal/vertical at 0.71x	Approx. 100% horizontal/vertical at 1x	Approx. 96% vertical/horizontal	95% horizontal/vertical at 0.85x	95% horizontal/vertical at 0.87x	95% horizontal/vertical at 0.8x
Viewfinder Information	Inside the picture area: Sixty-one focusing points, TBA% Spot metering circle. Displayed at the bottom of the viewing area: Numeric and textual information with 7-segment LCD • Shutter speed • Aperture value • AE Lock • FE Lock • Shots remaining • Max. burst • Multi-spot readings • Metering Pattern • Exposure level / Flash exposure level / Manual Exposure level • Exposure compensation / Flash compensation • Exposure bracketing • Flash ready / Hi-speed sync • Highlight Tone Priority • Focus confirmation • White Balance +/- • ISO speed • JPEG indicator • RAW indicator • Battery check • Memory card full warning • Shooting Mode • AF indicator	Inside the picture area: Area AF Ellipse, illuminated AF points and Spot metering circle. Displayed at the bottom and right side of the viewing area: • Shutter speed • Aperture value • AE Lock • FE Lock • Shots remaining • Max. burst • Multi-spot readings • Metering Pattern • Exposure level / Flash exposure level / Manual Exposure level • Exposure compensation / Flash compensation • Exposure bracketing • Flash ready / Hi-speed sync • Focus confirmation • White Balance +/- • ISO speed • JPEG indicator • RAW indicator • Battery check • Memory card full warning	Inside the picture area: Forty-five focusing points, 3.8% Spot metering circle. Displayed at the bottom of the viewing area: Numeric and textual information with 7-segment LCD • Shutter speed • Aperture value • AE Lock • FE Lock • Shots remaining • Max. burst • Multi-spot readings • Metering Pattern • Exposure level / Flash exposure level / Manual Exposure level • Exposure compensation / • Flash compensation • Exposure bracketing • Flash ready / Hi-speed sync • Focus confirmation • White Balance +/- • ISO speed • JPEG indicator • RAW indicator • Battery check • Memory card full warning	Inside the picture area: Nine focusing points, 3.5% Spot metering circle. Displayed at the bottom of the viewing area: Numeric and textual information with 7-segment LCD • Shutter speed • Aperture value • AE Lock • FE Lock • Max. burst • Exposure level • Flash exposure compensation • Exposure bracketing • Flash ready/High-speed sync • B/W shooting • Highlight Tone Priority • Focus confirmation • White Balance +/- • ISO speed • CF card full warning	Inside the picture area: Nineteen focusing points, 2.3% Spot metering circle, Compositional Grid. Displayed at the bottom of the viewing area: Numeric and textual information with 7-segment LCD • Shutter speed • Aperture value • AE Lock • FE Lock • Max. burst • Exposure level • Flash exposure compensation • Exposure bracketing • Flash ready /High-speed sync • Focus confirmation • Highlight Tone Priority • JPEG indicator • CF card full warning	Ilnside the picture area: Nineteen focusing points, 2.8% Spot metering circle, Compositional Grid. Displayed at the bottom of the viewing area: Numeric and textual information with 7-segment LCD • Shutter speed • Aperture value • AE Lock • FE Lock • Max. burst • Exposure level • Flash exposure compensation • Exposure bracketing • Flash ready /High-speed sync • Focus compensation • Highlight Tone Priority • JPEG indicator • CF card full warning • Electronic level (Horizontal only) • Battery check	Inside the picture area: Nine focusing points, 4% Spot metering circle. Displayed at the bottom of the viewing area: Numeric and textual information with 7-segment LCD • Shutter speed • Aperture Value • AE Lock • FE Lock • Max. Burst • Exposure Level • Flash Exposure Compensation • Exposure Warning • AF points • Flash Ready/High-speed Sync • Focus Confirmation • Highlight Tone Priority (D+) • Red-eye Reduction Light • ISO Speed • White Balance Correction • Monochrome shooting • SD/SDHC/SDXC memory card full warning	Inside the picture area: Nine focusing points, 4% Spot metering circle. Displayed at the bottom of the viewing area: Numeric and textual information with 7-segment LCD • Shutter speed • Aperture value • AE Lock • FE Lock • Max. burst • Exposure level • Flash exposure compensation • Exposure bracketing • Flash ready/High-speed sync • Focus confirmation • Highlight tone priority • ISO speed • White balance correction • Red-eye reduction light • Monochrome shooting • SD card information	Inside the picture area: Nine focusing points. Displayed at the bottom of the viewing area: Numeric and textual information with 7-segment LCD • Shutter speed • Aperture Value • AE Lock • FE Lock • Max. Burst • Exposure Level • Flash Exposure Compensation • Exposure Warning • AF points • Flash Ready/High-speed Sync • Focus Confirmation • Highlight Tone Priority (D+) • Red-eye Reduction Light • ISO Speed • White Balance Correction • Monochrome shooting • SD/SDHC/SDXC memory card full warning
Focusing Screens	Precision laser-matte screen Ec-C V Interchangeable (Ec series)	Laser-matte screen Ec-C IV with area AF Ellipse and fine Spot metering circle provided as the standard screen (Interchangeable with Ec-series focusing screens, metering correction data can be set with a custom function for the Laser-matte screens)	Precision laser-matte screen Ec-CIV Interchangeable (Ec series)	Precision laser-matte screen Eg-A marked with focusing points and Spot metering circle (Interchangeable with Eg-series focusing screens)	Intelligent Viewfinder with adaptable LCD overlay displaying Dual Axis Electronic Level, Compositional Grid, Spot Metering Circle; AF Selection Modes, and AF Points	Precision laser-matte screen Ef-A marked with focusing points and Spot metering circle (interchangeable with dedi-cated Ef-series screens. Metering correction can be set with Custom Function IV-4)	Precision laser-matte screen marked with focusing points (Non-interchangeable)	Precision laser-matte screen marked with focusing points and Spot metering circle	Precision laser-matte screen marked with focusing points (Non-interchangeable)
Self-Timer	Electronically controlled with 2- or 10-second delay	Electronically controlled with 2- or 10-second delay	Electronically controlled with 2- or 10-second delay	Electronically controlled with 2- or 10-second delay	Electronically controlled with 2- or 10-second delay	Approx. 5.7 x 4.2 x 3.1 in. / 144.5 x 105.8 x 78.6mm	Electronically controlled with 2- or 10-second delay	Electronically controlled with 2- or 10-second display	Electronically controlled with 2- or 10-second delay
Body Dimensions (W x H x D)	Approx. 6.2 x 6.4 x 3.3 in. / 158 x 163.6 x 82.7mm	6.1 x 6.3 x 3.1 in. / 156 x 159.6 x 79.9mm	6.1 x 6.2 x 3.1 in. / 156 x 156.6 x 79.9mm	6.0 x 4.5 x 3.0 in. / 152 x 113.5 x 75mm	5.3 x 4.4 x 2.9 in. / 148.2 x 110.7 x 73.5mm	6.0 x 4.5 x 3.0 in. / 152 x 113.5 x 75mm	Approx. 5.2 x 3.9 x 3.1 in. / 133.1 x 99.5 x 79.7mm	Approx. 5.1 x 3.8 x 2.4 in / 128.8 x 97.3 x 62.0mm	Approx. 5.1 x 3.9 x 3.0 in. / 129.9 x 99.7 x 77.9mm
Weight (Body Only)	TBA	42.5 oz. / 1,205g	41.6 oz. / 1,180g	28.6 oz. / 810g	28.9 oz. / 820g	23.8 oz. / 675g	Approx. 18.2 oz. / 515g	18.7 oz. / 530g***	Approx. 17.4 oz. / 495g

* Standard output sensitivity. Recommended exposure index.
** SDHC compatibility requires firmware update
*** Includes battery and memory card.

EOS System Chart

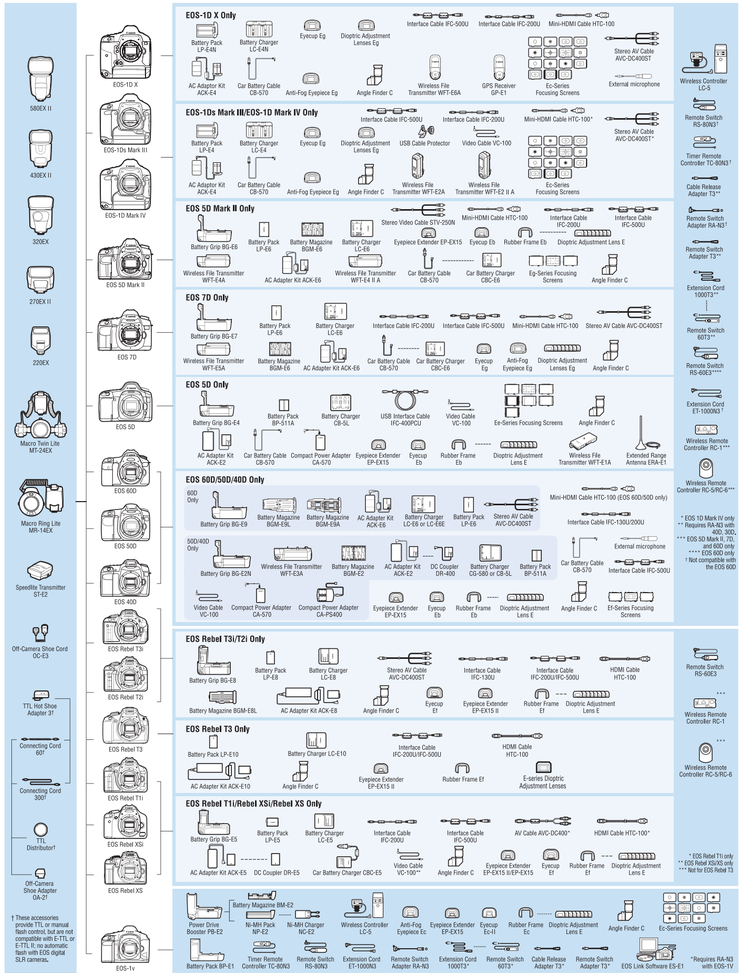


Image Format and Capacity Chart

Image Format		Recording Resolution	Recording Method	Compression Rate	Image File Size (MB)	Recording Capacity (shot)
EOS-1Ds Mark III*						
JPEG	Large	5616 x 3744 (Approx. 21.00 megapixels)	JPEG	Low Compression	6.4	290
	Medium 1	4992 x 3328 (Approx. 16.6 megapixels)			5.2	350
	Medium 2	4080 x 2720 (Approx. 11.0 megapixels)			3.9	470
	Small	1936 x 1288 (Approx. 2.5 megapixels)			2.2	840
RAW	.CR2	5616 x 3744 (Approx. 21.00 megapixels)	Lossless Compression	—	25.0	75
RAW + JPEG	Large	—	RAW + Separate JPEG File	—	25.0 + 6.4	54
	Medium 1				25.0 + 5.2	57
	Medium 2				25.0 + 3.9	60
	Small				25.0 + 2.2	64
sRAW	.CR2	2784 x 1856 (Approx. 5.2 megapixels)	Lossless Compression	—	14.5	130
sRAW + JPEG	Large	—	sRAW + Separate JPEG File	—	14.5 + 6.4	82
	Medium 1				14.5 + 5.2	90
	Medium 2				14.5 + 3.9	97
	Small				14.5 + 2.2	100
EOS-1D Mark IV						
JPEG	Large	4896 x 3264 (Approx. 16 megapixels)	JPEG	Low Compression	5.7	692
	Medium 1	4320 x 2880 (Approx. 12.40 megapixels)			4.5	874
	Medium 2	3552 x 2368 (Approx. 8.40 megapixels)			3.5	1148
	Small	2448 x 1632 (Approx. 4 megapixels)			2.0	1957
RAW	.CR2	4896 x 3264 (Approx. 16 megapixels)	Lossless Compression	—	22.2	175
RAW + JPEG	Large	—	RAW + Separate JPEG File	—	22.2 + 5.7	139
	Medium 1				22.2 + 4.5	145
	Medium 2				22.2 + 3.5	152
	Small				22.2 + 2.0	161
mRAW	.CR2	3672 x 2448 (Approx. 9 megapixels)	Lossless Compression	—	14.8	263
mRAW + JPEG	Large	—	mRAW + Separate JPEG File	—	14.8 + 5.7	190
	Medium 1				14.8 + 4.5	202
	Medium 2				14.8 + 3.5	214
	Small				14.8 + 2.0	232
S RAW	.CR2	2448 x 1632 (Approx. 4 megapixels)	Lossless Compression		9.9	397
sRAW + JPEG	Large		sRAW + Separate JPEG File		9.9 + 5.7	251
	Medium 1				9.9 + 4.5	272
	Medium 2				9.9 + 3.5	294
	Small				9.9 + 2.0	329
EOS 5D Mark II*						
JPEG	Large/Fine	5616 x 3744 (Approx. 21.00 megapixels)	JPEG	Low Compression	6.1	310
	Large/Normal			High Compression	3.0	610
	Medium/Fine	4080 x 2720 (Approx. 11.10 megapixels)		Low Compression	3.6	510
	Medium/Normal			High Compression	1.9	990
	Small/Fine	2784 x 1856 (Approx. 5.20 megapixels)		Low Compression	2.1	910
	Small/Normal			High Compression	1.0	1680
RAW	.CR2	5616 x 3744 (Approx. 21.00 megapixels)	Lossless Compression	—	25.8	72
RAW + JPEG	Large/Fine	—	RAW + Separate JPEG File	—	25.8 + 6.1	57
	Large/Normal				25.8 + 3.0	64
	Medium/Fine				25.8 + 3.6	62
	Medium/Normal				25.8 + 1.9	67
	Small/Fine				25.8 + 2.1	66
	Small/Normal				25.8 + 1.0	69
sRAW1	.CR2	3861 x 2574 (Approx. 10.00 megapixels)	Lossless Compression	—	14.8	120
sRAW1 + JPEG	Large/Fine	—	sRAW1 + Separate JPEG File	—	14.8 + 6.1	89
	Large/Normal				14.8 + 3.0	100
	Medium/Fine				14.8 + 3.6	100
	Medium/Normal				14.8 + 1.9	110
	Small				14.8 + 2.1	110
	Small/Normal				14.8 + 1.0	110
sRAW2	.CR2	2784 x 1856 (Approx. 5.20 megapixels)	Lossless Compression	—	10.8	170
sRAW2 + JPEG	Large/Fine	—	sRAW2 + Separate JPEG File	—	10.8 + 6.1	110
	Large/Normal				10.8 + 3.0	130
	Medium/Fine				10.8 + 3.6	130
	Medium/Normal				10.8 + 1.9	140
	Small/Fine				10.8 + 2.1	140
	Small/Normal				10.8 + 1.0	150

Image Format		Recording Resolution	Recording Method	Compression Rate	Image File Size (MB)	Recording Capacity (shot)
EOS 7D						
JPEG	Large/Fine	5184 x 3456 (Approx. 17.90 megapixels)	JPEG	Low Compression	6.6	593
	Large/Normal			High Compression	3.3	1169
	Medium/Fine	3456 x 2304 (Approx. 8.00 megapixels)		Low Compression	3.5	1122
	Medium/Normal			High Compression	1.8	2178
	Small/Fine	2592x 1728 (Approx. 4.50megapixels)		Low Compression	2.2	1739
	Small/Normal			Low Compression	1.1	3297
RAW	.CR2	5184x 3456 (Approx. 17.90 megapixels)	Lossless Compression	—	25.1	155
RAW + JPEG	Large/Fine	—	RAW + Separate JPEG File	—	25.1 + 6.6	122
	Large/Normal				25.1 + 3.3	136
	Medium/Fine				25.1 + 3.5	135
	Medium/Normal				25.1 + 1.8	144
	Small/Fine				25.1 + 2.2	141
	Small/Normal				25.1 + 1.1	147
mRAW	.CR2	5184 x 3456 (Approx. 10.10 megapixels)	Lossless Compression	—	17.1	229
mRAW + JPEG	Large/Fine	—	mRAW + Separate JPEG File	—	17.1 + 6.6	164
	Large/Normal				17.1 + 3.3	190
	Medium/Fine				17.1 + 3.5	189
	Medium/Normal				17.1 + 1.8	206
	Small				17.1 + 2.2	201
	Small/Normal				17.1 + 1.1	213
sRAW	.CR2	2592 x 1728 (Approx. 4.50 megapixels)	Lossless Compression	—	11.4	345
sRAW + JPEG	Large/Fine	—	sRAW + Separate JPEG File	—	11.4 + 6.6	217
	Large/Normal				11.4 + 3.3	265
	Medium/Fine				11.4 + 3.5	262
	Medium/Normal				11.4 + 1.8	297
	Small/Fine				11.4 + 2.2	287
	Small/Normal				11.4 + 1.1	311
EOS 60D						
JPEG	Large/Fine	5184 x 3456 (Approx. 17.90 megapixels)	JPEG	Low Compression	6.6	490
	Large/Normal	3456 x 2304 (Approx. 8.00 megapixels)		High Compression	3.3	990
	Medium/Fine			Low Compression	3.5	940
	Medium/Normal			High Compression	1.8	1930
	Small 1/Fine	2592 x 1728 (Approx. 4.50 megapixels)		Low Compression	2.2	1590
	Small 1/Normal				1.1	3100
	Small 2	1920 x 1280 (Approx. 2.50 megapixels)			1.3	2580
	Small 3	720 x 480 (Approx. 0.35 megapixels)			0.3	10780
RAW	.CR2	5184x 3456 (Approx. 17.90 megapixels)	Lossless Compression	—	24.5	130
RAW + JPEG	Large/Fine	—	RAW + Separate JPEG File	—	24.5 + 6.4	122
	Large/Normal				24.5 + 3.2	136
	Medium/Fine				24.5 + 3.4	135
	Medium/Normal				24.5 + 1.7	144
	Small 1/Fine				24.5 + 2.2	141
	Small 1/Normal				24.5 + 1.1	147
	Small 2			—	24.5 + 1.3	TBA
	Small 3				24.5 + 0.3	TBA
mRAW	.CR2	5184 x 3456 (Approx. 10.10 megapixels)	Lossless Compression	—	16.7	190
mRAW + JPEG	Large/Fine	—	mRAW + Separate JPEG File	—	16.7 + 6.4	140
	Large/Normal				16.7 + 3.2	TBA
	Medium/Fine				16.7 + 3.4	TBA
	Medium/Normal				16.7 + 1.7	TBA
	Small 1/Fine			—	16.7 + 2.2	TBA
	Small 1/Normal				16.7 + 1.1	TBA
	Small 2			—	16.7 + 1.3	TBA
	Small 3				16.7 + 0.3	TBA
sRAW	.CR2	2592 x 1728 (Approx. 4.50 megapixels)	Lossless Compression		11.1	300
sRAW + JPEG	Large/Fine	—	sRAW + Separate JPEG File		11.1 + 6.4	180
	Large/Normal				11.1 + 3.2	TBA
	Medium/Fine				11.1 + 3.4	TBA
	Medium/Normal				11.1 + 1.7	TBA
	Small 1/Fine				11.1 + 2.2	TBA
	Small 1/Normal				11.1 + 1.1	TBA
	Small 2				11.1 + 1.3	TBA
	Small 3				11.1 + 0.3	TBA

Image Format		Recording Resolution	Recording Method	Compression Rate	Image File Size (MB)	Recording Capacity (shot)
EOS Rebel T3i						
JPEG	Large/Fine	5184 x 3456 (Approx. 17.9 megapixels)	JPEG	Low Compression	6.4	570
	Large/Normal			High Compression	3.2	1120
	Medium/Fine	3456 x 2304 (Approx. 8.00 megapixels)		Low Compression	3.4	1070
	Medium/Normal			High Compression	1.7	2100
	Small/Fine	2592 x 1728 (Approx. 4.5 megapixels)		Low Compression	2.2	1670
	Small/Normal			High Compression	1.1	3180
	Small 2	1920 x 1280 (Approx. 2.5 megapixels)			1.3	2780
	Small 3	720 x 480 (Approx. 0.35 megapixels)			0.3	10780
RAW	.CR2	5184 x 3456 (Approx. 17.9 megapixels)	Lossless Compression	—	24.5	150
RAW+ JPEG	Large/Fine	—	RAW + Separate JPEG File	—	24.5+6.4	110
EOS Rebel T2i***						
JPEG	Large/Fine	5184 x 3456 (Approx. 17.90 megapixels)	JPEG	Low Compression	6.4	570
	Large/Normal			High Compression	3.2	1120
	Medium/Fine	3456 x 2304 (Approx. 8.0 megapixels)		Low Compression	3.4	1070
	Medium/Normal			High Compression	1.7	2100
	Small/Fine	2592 x 1728 (Approx. 4.5 megapixels)		Low Compression	2.2	1670
	Small/Normal			High Compression	1.1	3180
RAW	.CR2	5184 x 3456 (Approx. 17.90 megapixels)	Lossless Compression	—	24.5	150
RAW+ JPEG	Large/Fine	—	RAW + Separate JPEG File	—	24.5+6.4	100
EOS Rebel T3***						
JPEG	Large/Fine	4272 x 2848 (Approx. 12.2 megapixels)	JPEG	Low Compression	4.4	830
	Large/Normal			High Compression	2.2	1600
	Medium/Fine	3088 x 2056 (Approx. 6.3 megapixels)		Low Compression	2.6	1400
	Medium/Normal			High Compression	1.4	2630
	Small	2256 x 1504 (Approx. 3.4 megapixels)		Low Compression	1.7	2130
	Small/Normal			High Compression	0.9	4060
	Small 2	1920 x 1280 (Approx. 2.5 megapixels)			1.2	2880
	Small 3	720 x 480 (Approx. 0.35 megapixels)			0.3	11280
RAW	.CR2	4272 x 2848 (Approx. 12.2 megapixels)	Lossless Compression	—	16.7	5
RAW+ JPEG	Large/Fine	—	RAW + Separate JPEG File	—	16.7+4.4	1
EOS Rebel T1i ****						
JPEG	Large/Fine	4752 x 3168 (Approx. 15.10 megapixels)	JPEG	Low Compression	5.0	370
	Large/Normal			High Compression	2.5	740
	Medium/Fine	3456 x 2304 (Approx. 8.0 megapixels)		Low Compression	3.0	610
	Medium/Normal			High Compression	1.6	1190
	Small/Fine	2352 x 1568 (Approx. 3.7 megapixels)		Low Compression	1.7	1080
	Small/Normal			High Compression	0.9	2030
RAW	.CR2	4752 x 3168 (Approx. 15.10 megapixels)	Lossless Compression	—	20.2	90
RAW+ JPEG	Large/Fine	—	RAW + Separate JPEG File	—	20.2 + 5.0	72
EOS Rebel XSi***						
JPEG	Large/Fine	4272 x 2848 (Approx. 12.2 megapixels)	JPEG	Low Compression	4.3	460
	Large/Normal			High Compression	2.2	880
	Medium/Fine	3088 x 2056 (Approx. 6.3 megapixels)		Low Compression	2.5	770
	Medium/Normal			High Compression	1.3	1470
	Small/Fine	2256 x 1504 (Approx. 3.4 megapixels)		Low Compression	1.6	1190
	Small/Normal			High Compression	0.8	2290
RAW	.CR2	4272 x 2848 (Approx. 12.2 megapixels)	Lossless Compression	—	15.3	120
RAW+ JPEG	Large/Fine	—	RAW + Separate JPEG File	—	15.3 + 4.3	99
EOS Rebel XS**						
JPEG	Large/Fine	3888 x 2592 (Approx. 10.1 megapixels)	JPEG	Low Compression	3.8	514
	Large/Normal			High Compression	2.0	982
	Medium/Fine	2816 x 1880 (Approx. 5.3 megapixels)		Low Compression	2.3	859
	Medium/Normal			High Compression	1.2	1630
	Small/Fine	1936 x 1288 (Approx. 2.5 megapixels)		Low Compression	1.3	1474
	Small/Normal			High Compression	0.7	2816
RAW	.CR2	3888 x 2592 (Approx. 10.1 megapixels)	Lossless Compression	—	9.8	199
RAW+ JPEG	Large/Fine	—	RAW + Separate JPEG File	—	9.8 + 3.8	143

Movie Recording Size and Time

Movie Recording Size	Frame Rate	Total Recording Time 4GB Card	Total Recording Time 16GB Card	File Size
EOS-1D Mark IV				
1920x1080 (16:9) Full HD	30fps	12 min.	49 min.	330 MB/min.
	25fps			
	24fps			
1280x720 (16:9) HD	60fps	12 min.	49 min.	330 MB/min.
	50fps			
640x480 (4:3) SD	60fps	24 min.	1 hr. 39 min.	165 MB/min
	50fps			
EOS 5D Mark II				
1920x1080 (16:9) Full HD	30fps	12 min.	49 min.	330 MB/min.
640x480 (4:3) SD	30fps	24 min.	1 hr. 39 min.	165 MB/min
EOS 7D				
1920x1080 (16:9) Full HD	30fps	12 min.	49 min.	330 MB/min.
	25fps			
	24fps			
1280x720 (16:9) HD	60fps	12 min.	49 min.	330 MB/min.
	50fps			
640x480 (4:3) SD	60fps	24 min.	1 hr. 39 min.	165 MB/min
	50fps			
EOS 60D				
1920x1080 (16:9) Full HD	30fps	12 min.	49 min.	330 MB/min.
	25fps			
	24fps			
1280x720 (16:9) HD	60fps	12 min.	49 min.	330 MB/min.
	50fps			
640x480 (4:3) SD (Movie Crop)	60fps	24 min.	1 hr. 39 min.	165 MB/min
	50fps			
EOS Rebel T3i		(8GB Card)		
1920x1080	30fps	22 min.	44 min.	330 MB/min.
	25fps			
	24fps			
1280x720	60fps	22 min.	44 min.	330 MB/min.
	50fps			
640x480	30fps	1 hr. 32 min.	3 hr. 4 min.	82.5 MB/min
	25fps			
EOS Rebel T2i				
1920x1080 (16:9) Full HD	30fps	12 min.	49 min.	330 MB/min.
	25fps			
	24fps			
1280x720 (16:9) HD	60fps	12 min.	49 min.	330 MB/min.
	50fps			
640x480 (4:3) SD	60fps	24 min.	1 hr. 39 min.	165 MB/min
	50fps			
640x480 (4:3) SD (Movie Crop)	60fps	24 min.	1 hr. 39 min.	165 MB/min
	50fps			
EOS Rebel T3				
1280x720	30fps	17 min.	1 hr. 8 min.	222 MB/min.
	25fps			
EOS Rebel T1i				
1920x1080 (16:9) Full HD	20fps	12 min.	49 min.	330 MB/min.
1280x720 (16:9) HD	30fps	18 min.	1 hr. 13 min.	222 MB/min.
640x480 (4:3) SD	30fps	24 min.	1 hr. 39 min.	165 MB/min

JPEG file sizes will vary depending on the subjects, shooting mode, and ISO speed. * Based on a 2GB CF card, JPEG quality 8, ISO 100, Standard Picture Style and Canon standard testing methods. ** Based on a 1GB CF card, JPEG quality 8, ISO 100, Standard Picture Style and Canon standard testing methods. *** Based on a 512MB CF card and Canon standard testing methods. **** Based on a 2GB SD card and Canon standard testing methods. *****The number of possible shots and maximum burst apply to a 4GB SDHC card based on Canon's testing standards.

©Arthur Morris

EF LENS TECHNOLOGY

Great images start with great lenses and, in many ways, an SLR is defined by the quality, breadth and scope of its associated system of lenses. For many, Canon EF series lenses alone are reason enough to choose the EOS System. A blend of some of the world's most advanced optical, microelectronic, and precision manufacturing technologies, EF lenses are perfected in Canon's laboratories and proven in the field. Whatever you shoot, whatever your budget, there are Canon EF lenses perfect for your needs.

Optical Image Stabilizer

Canon Optical Image Stabilizer technology makes handheld photography more practical at slow shutter speeds, accommodating more low-light shooting situations than ever before. Camera shake typically occurs at shutter speeds less than 1/ [focal length], resulting in image blur. Canon Optical Image Stabilizer technology uses miniature sensors and a high-speed microcomputer built into the lens. The sensors analyze vibrations and apply correction via a special stabilizing lens group that shifts the image parallel to the focal plane. Motion blur is

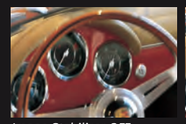


Image Stabilizer OFF

Image Stabilizer ON

canceled, resulting in a sharper image. With Optical Image Stabilization, it's like gaining up to four stops. Canon Optical Image Stabilizer technology is built into many EF or EF-S lenses and outperforms in-camera stabilization technologies found in other cameras by allowing for more movement of the stabilizing lens group. Especially with telephoto lenses, as the lens focal length increases, the effect of shake and the degree of correction needed to cancel it increase as well. **With the Optical Image Stabilizer in the lens, Canon can equip each IS lens with a stabilization unit optimized for the focal lengths and optical characteristics unique to that lens. Other systems are limited by how far they can move an image sensor and, as a result, their stabilization is less effective as telephoto lengths get longer. Also, the result of Optical Image Stabilization can be seen right in the viewfinder—impossible with some other stabilizer systems.**

Image Stabilization: It Belongs In the Lens

Because every lens is different, different lenses have different Optical Image Stabilizer needs.

- *Reduces motion blur by counteracting camera shake during handheld photography*
- *With Optical Image Stabilizer in the lens, Canon can equip each Optical Image Stabilizer lens with the stabilizer it needs*
- *Found on some telephoto lenses, Optical Image Stabilizer Mode 2 is especially effective when doing panned shots*
- *With Canon Optical Image Stabilizer, the effects of the stabilization can be seen in the viewfinder—the image is steadier, making composition more accurate*

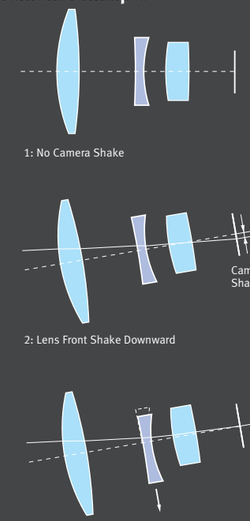
How the Image Stabilizer Works *— The Optical Image Stabilizer shifts a lens group in parallel to the focal plane. When the lens jerks due to camera shake, the light rays from the subject are bent relative to the optical axis, resulting in a blurred image. Camera shake is detected by two gyro sensors (one each for the yaw and pitch). The gyro sensors detect the angle and speed of the camera shake caused by handheld shooting. By moving select lens elements according to how the entire lens is being shaken, the image passing through the lens can be steady and sharp when it hits the imaging sensor. The figure on the extreme right shows what happens when the lens is jerked downward. The center of the image moves downward on the focal plane. When the Optical Image Stabilizer lens group shifts downward, the light rays are refracted so that the image center returns to the center of the focal plane.*

Optical Image Stabilizer Units

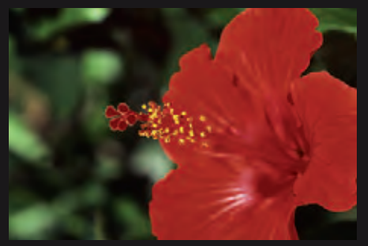
Since image shake occurs in both the horizontal and vertical directions, the Optical Image Stabilizer lens group can shift vertically and horizontally on a plane perpendicular to the optical axis to counteract the image shake.

OPTICAL IMAGE STABILIZER

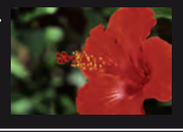
Optical Image Stabilizer Parallel Movement Principle



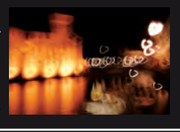
Optical Image Stabilizer in effect, right in the viewfinder.

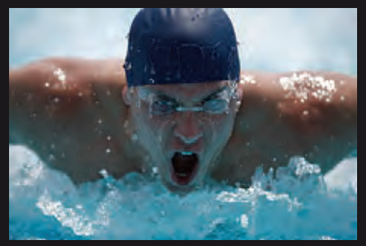


Close-up *— For close-up shots, even the tiniest of motions is magnified and spoils a great shot!*

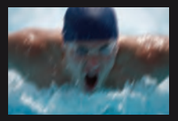


Low-light *— In low light situations, when you would normally expect to have to use flash or tripod, Canon's Optical Image Stabilizer lenses give you the freedom of up to 4 stops of light.*





Telephoto *— Canon designs each Optical Image Stabilizer system to complement the lens' focal length. So even with telephoto lenses you'll capture the shot!*



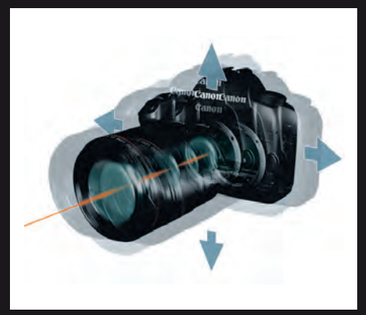
Taken with EF 100-400mm f/4.5-5.6L IS USM

Optical Image Stabilizer Mode 2 and Mode 3

The standard settings of the Optical Image Stabilizer are set so that it is most effective when photographing stationary subjects. However when panning with a moving subject is attempted (tracking of the subject horizontally or vertically), the shake-correction of the OIS may inadvertently over-compensate and interfere with framing. To help resolve this, Canon developed Optical Image Stabilizer Mode 2. In this mode, if you move the lens to follow a subject for a pre-determined time, the Optical Image Stabilizer does not correct for the intentional panning while continuing to correct any camera shake that's perpendicular to the panning motion. The result is a virtually smooth viewfinder image as you follow the moving subject. Optical Image Stabilizer Mode 3 activates IS only when the shutter button is fully pressed, allowing for easy panning of fast-moving subjects.

Hybrid Image Stabilizer

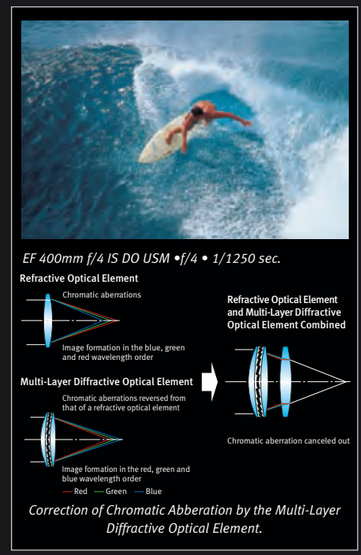
During normal shooting situations, sudden camera movement is rotational and can cause significant image blur. During macro or close-up photography however, the image blur caused by linear camera shake—when the camera moves parallel to the subject—is more pronounced. Optical Image Stabilizer is optimized to counteract rotational or linear camera shake and works well for most camera shooting situations. To help compensate for linear camera shake, a new acceleration sensor determines the amount of shift-based camera movement. The new Canon Hybrid Image Stabilizer technology employs a highly sophisticated algorithm that combines the feedback of both the acceleration sensor and angular velocity sensor (found in Hybrid OIS technology) and moves the image stabilizer lens elements, effectively compensating for both rotational and linear camera shake. Hybrid IS dramatically enhances the effects of Optical Image Stabilizer especially during macro shooting, which may be difficult for conventional image stabilization technologies.



Linear Camera Shake

Diffractive Optics (DO)

Canon's use of diffractive optics (DO) results in high-performance lenses that are much smaller and lighter than traditional designs. Canon's unique multilayer diffractive elements are constructed by bonding diffractive coatings to the surfaces of two or more lens elements. These elements are then combined to form a single multilayer DO element. Conventional glass lens elements disperse incoming light, causing chromatic aberration. The DO element's dispersion characteristics are designed to cancel chromatic aberrations at various wavelengths when combined with conventional glass optics. This technology results in smaller lenses with no compromise in image quality. Canon has also developed a new triple-layer type DO lens that uses an advanced diffractive grating to deliver excellent performance, with superb control of color fringing. This configuration is ideal for zoom lens optics and provides significant reductions in size. A good example is the EF 70-300mm f/4.5-5.6 DO IS USM lens, which is 28 percent shorter than the EF 70-300mm f/4-5.6 IS USM lens.



EF 400mm f/4 IS DO USM •f/4 • 1/1250 sec.

Correction of Chromatic Abberation by the Multi-Layer Diffractive Optical Element.

Ultrasonic Motor

Canon developed the world's first lens-based Ultrasonic Motor (USM) to power the lens autofocus mechanism. Instead of large noisy drive trains powered by conventional motors, Canon USM lenses employ the minute electronic vibrations created by piezoelectric ceramic elements. The focusing action of the lens is fast and quiet, with virtually instantaneous stops and starts. USM lenses also draw minimal power from the camera, ensuring longer battery life. Canon makes two types of Ultrasonic Motor lenses. Ring-type USM lenses, found in large aperture and super-telephoto designs, permit manual focusing without first switching out of the auto mode. Micro USM designs bring the performance benefits of Canon's USM technology to a wide assortment of affordable EF lenses.

Ring-type USM

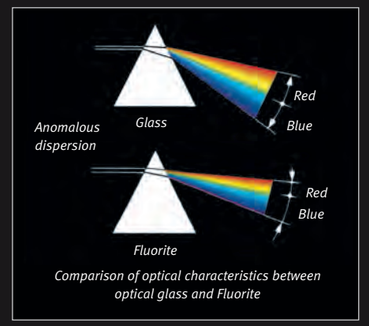
Micro USM

L-Series Lenses

Most highly regarded among professional photographers, Canon L-series lenses are distinguished by a bold red ring around the outer barrel. What makes them truly distinctive, however, is their remarkable optical performance — the result of sophisticated Canon technologies, such as Ultra-low Dispersion UD glass, Fluorite and Aspherical elements and Super Spectra Coating.

Fluorite / UD Elements (CaF_2 UD S-UD)

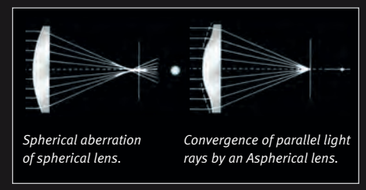
Reducing color fringing, or chromatic aberration, has been one of the great challenges in the design of telephoto lenses. L-series telephoto lenses – like the EF 70-200mm f/2.8 IS II USM and EF 300mm f/4L IS USM – employ Canon's Ultra-low Dispersion glass to minimize this effect, providing much improved contrast and sharpness. Even more effective at suppressing chromatic aberration are Fluorite elements, used in high-end super-telephoto L-series lenses. Composed of crystallized calcium fluoride (CaF_2), a single Fluorite element, although costly, has roughly the corrective power of two UD-glass elements, giving these L-series lenses their spectacular performance and relatively compact design.



Comparison of optical characteristics between optical glass and Fluorite

Aspherical Elements (AL)

Wide-angle lenses and fast normal-focal-length lenses often suffer from spherical aberration. When the light rays coming through the center of the lens do not converge at the same point as light rays coming through the lens edge, the image appears blurred because there is no sharp point of focus. Canon's Aspherical elements use a varying curved surface to ensure that the entire image plane appears focused. Aspherical optics also help to correct curvilinear distortion as one might find in ultra wide-angle lenses. Canon designs aspherical elements with extremely precise variable curvature of one or both sides, making possible lighter, more compact lenses.



Spherical aberration of spherical lens.

Convergence of parallel light rays by an Aspherical lens.

Subwavelength and Fluorine Anti-smear Coatings (SWSC FASC)

The Subwavelength Coating (SWC) is a new proprietary lens coating that helps control ghost and flare to a far greater degree than with earlier coating technologies. Utilizing SWC technology on large-curvature lens elements that are mainly found in wide-angle lenses, will significantly minimize the occurrence of ghosting and flare caused by reflected light in environments that have posed problems. SWC is used on the latest Canon wide-angle lens, EF 24mm f/1.4L II USM. The Fluorine anti-smear coating keeps soiling, smears and fingerprints to a minimum for easy cleaning.

EF 24mm f/1.4L II USM f/6.3 •13 sec.

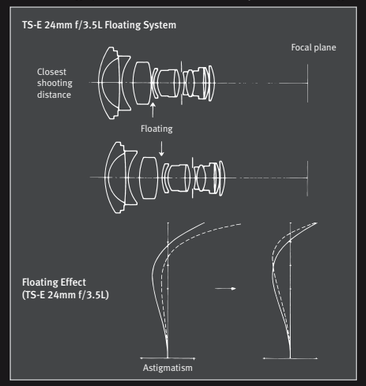
Focus Preset (FP)

Focus Preset enables you to program a focusing distance in the camera's memory. Normal picture taking and focusing are unaffected by preset distances. For example, at a soccer game, you Focus Preset the goal area. Shoot normally elsewhere on the field, but once the action moves toward the goal, the user can instantly return to the preset distance by turning a ring on the lens.

Floating System

Float

Typical lenses correct for optical aberrations only at commonly used focusing distances. Not surprisingly, at other focusing distances, especially close range, aberrations can compromise image quality. Rather than using fixed spacings, Canon's floating system dynamically varies the gap between key lens elements based on focusing distance. Most aberrations are effectively suppressed throughout the focusing range, assuring high image quality in all shooting situations.



Circular Aperture

Canon lenses featuring circular aperture diaphragms employ curved blades to create a smoothly rounded opening as the lens is stopped down. As a result, most out-of-focus background highlights are rendered as natural-looking rounded shapes rather than as distracting polygons. These lenses deliver smooth, consistent stop-down action (even at 14 fps), near-silent operation and excellent optical characteristics.

Inner and Rear Focusing

I/R

An inner focusing lens has the focusing lens group(s) in front of the diaphragm, while a rear focusing lens has the focusing lens group(s) behind the diaphragm. Both designs allow for compact optical systems that produce faster AF. And because the front of the lens does not rotate to focus, filter orientation remains constant.

AF Stop Feature

AFSF

Pressing the AF Stop button (featured on several EF IS telephoto lenses) momentarily locks the AF to help prevent the focus from shifting to a passing obstruction. After the obstruction has cleared, the focus will still be on the subject, and you can quickly resume shooting. AF Stop buttons are positioned at four locations around the lens grip for easy access.

Dust- and Water-Resistant Construction

DW-R

Most L-series EF telephoto lenses are highly dust- and water-resistant thanks to rubber seals at the switch panels, exterior seams, drop-in filter compartments and lens mounts. Moving parts, such as the focusing ring and switches, are also designed to help keep out environmental contaminants, providing reliable performance under harsh conditions.

EF 24mm f/1.4L II USM •f/2.8 •1/30 sec.

Full-Time Manual Focusing

FT-M

Canon EOS cameras with EF lenses deliver impeccable AF precision. Manual focusing capability, nevertheless, can enhance flexibility. Canon EF lenses with full-time manual focusing enable the photographer to manually tweak focus without switching out of AF mode. Since AF action does not cause the focusing ring to turn, it can be made wider for improved grip and comfort.

TS-E Movements

Tilt Movements alter the angle of the plane of focus between the lens and focal plane, and Shift Movements move the lens's optical axis in parallel.

Reverse tilt and shift greatly reduces the range on which focusing is possible.

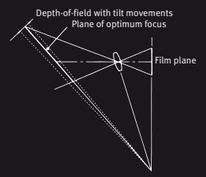
Shift was used to adjust the image to keep the building perpendicular all the way to the top.

The lens's tilt mechanism is used to achieve a pan focus effect that allows focusing all the way back.

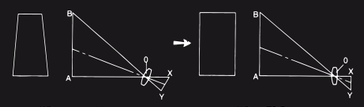
Without using shift causes the image of the building to lean in at the top.

***Tilt Movements** –Using a normal lens, shallow or deep focus is controlled by the size of the aperture used to adjust depth-of-field. Canon TS-E lenses can help achieve this by the tilting of the lens barrel in relationship to the focal and subject planes. This allows for the appearance of extremely deep focus even at wide open apertures, and shallow focus at smaller apertures.*

***Shift Movements** – By keeping the camera level, and using the shift function to raise the lens instead, this perspective effect can be corrected. With the camera's focal plane set parallel to the building, shifting the lens upward will obtain a more rectangular-looking building.*



Using Tilt Movements to Focus an Oblique Subject Plane



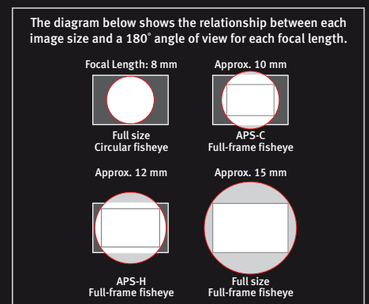
Using Shift Movements to Focus Tall Building

EF 8–15mm f/4 Fisheye •f/4 •1024 sec.

EF 8–15mm f/4 Fisheye •f/5.6 •1/200 sec.

Specialty Lenses

Fisheye — With its unique focal length range, the EF 8-15mm f/4L Fisheye USM is the world's widest fisheye zoom lens. It delivers 180° diagonal angle of view images for all EOS SLR cameras with imaging formats ranging from full-frame to APS-C, and provides 180° circular fisheye images for full-frame EOS models. This new Canon lens has a wide zoom range feature that provides a truly elevated level of creativity and performance for users shooting artistic compositions or panoramic landscapes, as well as astronomy and sports.



EF-S Lenses — Designed for the Canon EOS 7D, EOS 60D and all EOS Rebel models with APS-C sized sensors (with a 1.6x crop factor), Canon's EF-S lenses take advantage of the sensor's smaller size to help deliver optimized performance in compact, lightweight designs. The EF-S 15–85mm f/3.5-5.6 IS USM is a perfect example of this technology. With a compact design, a 35mm equivalent range of 24–136mm, and Optical Image Stabilizer technology, it's a superlative walk-around lens... possibly the only lens you'll need to enjoy basic Canon digital SLR photography.

TS-E — TS-E lenses are capable of tilt and shift movements, which bring many of the advantages of technical view cameras to the EOS System. Tilt movements alter the angle of the plane of focus between the lens and film plane, making broad depth-of-field possible even at larger apertures; shift movements slide the lens's optical axis along the film/sensor plane, enabling photographers to correct or alter perspective at almost any angle.

Macro — Canon's EF lens lineup has a number of options for true close-up and macro photography. With five macro lenses for precision, and three screw-on close-up lenses for convenience—in addition to Life-Size Converter EF and two Extension Tubes—Canon's macro lenses and close-up accessories can uncover detail that is nearly impossible for the unaided human eye to detect.

EF Mount

In designing the EF lens mount, Canon engineers gave photographers a lot more than a way to quickly attach a lens to a camera body. As the communication conduit between camera and lens, this fully electronic mount system has none of the shock, operational noise, abrasion, play, lubrication requirements, slow response, lever operation limitations, or other design restrictions related to mechanical linkage mechanisms. A self-test system, using the lens's built-in microcomputer, can even warn of malfunctions through the camera's display. The EF mount makes possible high-speed autofocus, precise aperture control and preview, automatic compensation with lens extenders, and both forward and backward compatibility with new lens technologies—such as USM and Hybrid IS—as they are developed by Canon.

About Macro Magnification

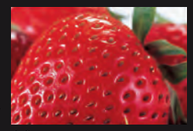
A life-size macro lens—that is, a 1x magnification—records an image on film at its actual size. If you're photographing fruits, for example, and it has a diameter of 1 in., it will occupy 1 in. of your actual slide or negative. With a digital SLR, at 1.0x magnification, the image projected onto your camera's sensor will likewise be the same size at the sensor plane as the actual subject itself. Other macro lenses have lower or higher magnifications. A lens with 0.5x magnification will produce an image on film that is half the size of the actual subject. Your 1 in. fruit then would only occupy 0.5 in. on film.

In the other direction, a 5x magnification lens will convert the 1-in. fruit to a 5-in. diameter image. Since the entire image won't fit in the frame of your film, you will have an enlarged image of a detail of the fruit.

Magnification is not the same as focal length. A 50mm lens and a 180mm might both be macro lenses with, for example, 1.0x magnification. The advantage of the longer lens is that it allows greater distance from a subject, while allowing the same magnification in the final image. The 180mm lens is ideal for shooting tiny subjects without disturbing them; the 50mm is better choice for copying flat documents.

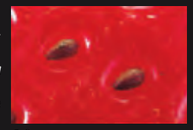
0.25x

0.5x



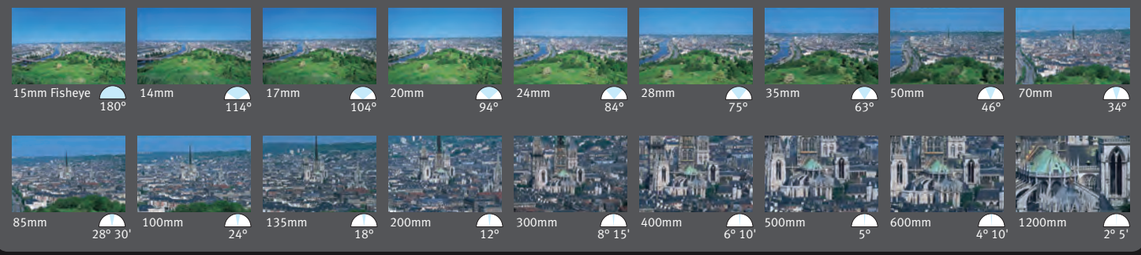
1.0x

3.0x



5.0x

FOCAL LENGTH COMPARISON



Take In the Wider View.

Canon EF fixed-focal-length wide-angle lenses are exceptionally sharp, virtually distortion-free, and fast – making them great choices for low-light shooting. EF ultra-wide zooms deliver stunning perspectives. The added versatility of zooming makes them perfect for enthusiasts and professionals alike.

EF LENSES for EOS Cameras

Ultra-Wide Zoom

EF 8-15mm f/4L Fisheye USM

UD (1) AL (3) FT-M FASC

EF-S 10-22mm f/3.5-4.5 USM*

AL (3) S-UD (1) I/R FT-M

EF 16-35mm f/2.8L II USM

AL (3) UD (2) I/R FT-M DW-R

EF 17-40mm f/4L USM

AL (3) S-UD (1) I/R FT-M DW-R

Wide-Angle

EF 24mm f/1.4L II USM •f/2.8 •1/30 sec.

EF 14mm f/2.8L II USM

AL (2) UD (2) I/R FT-M

EF 20mm f/2.8 USM

I/R FT-M Float

EF 24mm f/1.4L II USM

AL (2) UD (2) I/R FT-M Float SWSC

EF 24mm f/2.8

I/R

EF 28mm f/1.8 USM

AL (1) I/R FT-M

EF 28mm f/2.8

AL (1)

EF 35mm f/1.4L USM

AL (1) I/R FT-M Float

EF 35mm f/2

Icons: See "EF Lens Technology" section. ***Diagram:*** *Super UD Lens UD Lens Aspherical Lens*

** For EOS 7D, 60D, 50D, 40D, 30D, 20D/20Da, Rebel T3i, T2i, T3, T1i, XSi, XS and all versions of EOS Digital Rebel only.*

See It. Capture It.

EF "standard" zooms cover a popular range of focal lengths for most photographers, from wide-angle through telephoto. This versatility makes them great for a wide range of shooting situations. EF medium telephoto lenses help deliver natural perspective with wide maximum apertures that make them ideal for low-light shooting.

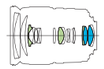
EF LENSES for EOS Cameras

Standard Zoom

EF-S 15-85mm f/3.5-5.6 IS USM*

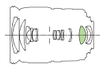
AL (3) UD (1) I/R OIS

EF-S 17-55mm f/2.8 IS USM*



AL (3) UD (2) I/R FT-M OIS

EF-S 17-85mm f/4-5.6 IS USM*

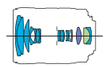


AL (3) I/R FT-M OIS

EF-S 18-55mm f/3.5-5.6 IS II*

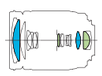
AL (3) OIS

EF-S 18-135mm f/3.5-5.6 IS*



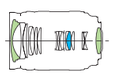
AL UD I/R OIS

EF-S 18-200mm f/3.5-5.6 IS*



AL (3) UD (2) OIS

EF 24-70mm f/2.8L USM



AL (1) UD (1) I/R FT-M DW-R

EF 24-105mm f/4L IS USM

AL (3) S-UD (1) OIS I/R FT-M

EF 28-135mm f/3.5-5.6 IS USM

AL (1) I/R FT-M OIS

EF 24-105mm f/4L IS USM •f/10 •1/125 sec.

Standard and Medium Telephoto

EF 50mm f/1.2L USM

AL (1) FT-M DW-R

EF 50mm f/1.4 USM

FT-M

EF 50mm f/1.8 II

EF 85mm f/1.2L II USM

AL (1) FT-M Float

EF 85mm f/1.8 USM

I/R FT-M

EF 100mm f/2 USM

I/R FT-M

Icons: See "EF Lens Technology" section. ***Diagram:*** *Super UD Lens UD Lens Aspherical Lens*

** For EOS 7D, 60D, 50D, 40D, 30D, 20D/20Da, Rebel T3i, T2i, T3, T1i, XSi, XS and all versions of EOS Digital Rebel only.*

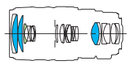
Focus Your Attention.

Telephoto lenses make it easy to throw backgrounds out of focus, grab detail, or "get close" to unapproachable subjects... and these EF zoom lenses are superb tools for the job. EF fixed-focal-length telephotos combine great picture quality with fast maximum apertures, making them ideal for handheld shooting in low light.

EF LENSES for EOS Cameras

Telephoto Zoom

EF 28-300mm f/3.5-5.6L IS USM

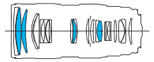


UD(3) AL(2) I/R FT-M OIS

EF-S 55-250mm f/4-5.6 IS II*

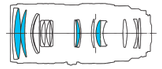
UD(1) OIS

EF 70-200mm f/2.8L IS II USM



UD(1) I/R FT-M OIS DW-R

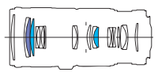
EF 70-200mm f/2.8L USM



UD(1) I/R FT-M

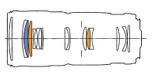
70-300mm f/4-5.6L IS USM •f/5.6 •1/1600 sec.

EF 70-200mm f/4L IS USM



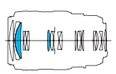
CaF2(1) UD(2) I/R FT-M OIS DW-R

EF 70-200mm f/4L USM



CaF2(1) S-UD(2) I/R FT-M

EF 70-300mm f/4-5.6L IS USM

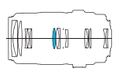


UD(2) I/R Float OIS DW-R FASC

EF 70-300mm f/4.5-5.6 DO IS USM

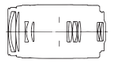
DO I/R FT-M OIS

EF 70-300mm f/4-5.6 IS USM

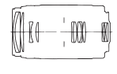


UD(1) OIS

EF 75-300mm f/4-5.6 III USM



EF 75-300mm f/4-5.6 III



EF 100-400mm f/4.5-5.6L IS USM

CaF2(1) S-UD(1) I/R FT-M Float OIS

Icons: See "EF Lens Technology" section. ***Diagram:*** *Fluorite Lens Super UD Lens UD Lens DO Lens Aspherical Lens*

** For EOS 7D, 60D, 50D, 40D, 30D, 20D/20Da, Rebel T3i, T2i, T3, T1i, XSi, XS and all versions of EOS Digital Rebel only.*

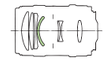
EF LENSES for EOS Cameras

Telephoto

EF 135mm f/2L USM

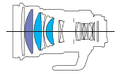
UD(2) I/R FT-M

EF 135mm f/2.8 w/Softfocus



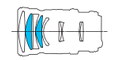
AL(1) I/R

EF 200mm f/2L IS USM



CaF2(1) UD(2) I/R FT-M FP OIS AFSF DW-R

EF 200mm f/2.8L II USM

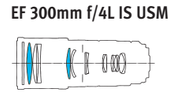


UD(2) I/R FT-M

EF 300mm f/2.8L IS II USM

CaF2(2) I/R SWSC OIS AFSF DW-R FASC

EF 300mm f/4L IS USM



UD(2) I/R FT-M OIS

300mm f/2.8L IS II USM •f/2.8 •1/160 sec.

Extenders

EXTENDER EF 1.4x III

DW-R FASC

EXTENDER EF 2x III

DW-R FASC

Extension Tube EF 12 II
Extension Tube EF 25 II

Icons: See "EF Lens Technology" section. ***Diagram:*** *Fluorite Lens Super UD Lens UD Lens DO Lens*

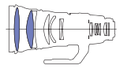
Up Close Detail from Afar.

Distinguished by their white color and seen at major sporting events around the world, the powerful EF super-telephotos are also ideal for nature, scenic and even outdoor fashion photography. Canon's ring-type USM delivers a high level of focusing performance, and most feature Canon's superb Image Stabilization. EF tele extenders and extension tubes add even more power and versatility.

EF LENSES for EOS Cameras

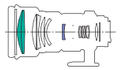
Super Telephoto

EF 400mm f/2.8L IS II USM



UD 1 · CaF2 2 · I/R · SWSC · OIS · AFSF · DW-R · FASC

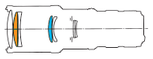
EF 400mm f/4 DO IS USM



DO · CaF2 1 · I/R · FT-M · FP · OIS · AFSF · DW-R

600mm f/4L IS II USM •f/4 •1/400 sec.

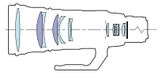
EF 400mm f/5.6L USM



UD 1 · S-UD 1 · I/R · FT-M

NEW

EF 500mm f/4L IS II USM

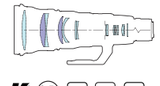


CaF2 1 · FT-M · SWSC · FP · OIS · AFSF · DW-R

400mm f/2.8L IS II USM •f/2.8 •1/2500 sec.

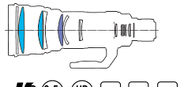
NEW

EF 600mm f/4L IS II USM



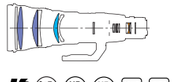
CaF2 1 · FT-M · SWSC · FP · OIS · AFSF · DW-R

EF 600mm f/4L IS USM



CaF2 1 · UD 2 · I/R · FT-M · FP · OIS · AFSF · DW-R

EF 800mm f/5.6L IS USM



CaF2 1 · UD 2 · UD 1 · I/R · FT-M · FP · OIS · AFSF · DW-R

Icons: *See "EF Lens Technology" section.* ***Diagram:*** *Fluorite Lens · Super UD Lens · UD Lens · DO Lens · Aspherical Lens*

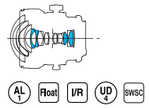
Solutions for Specialized Shooting.

Canon's manual focus TS-E (Tilt-Shift) lenses provide tilt capability to alter the plane of focus and shift capability for perspective correction, offering solutions for numerous applications, from architectural to studio photography. Canon also offers a range of close-up, high-magnification shooting solutions with a lineup of exceptional macro lenses and accessories.

EF LENSES for EOS Cameras

Tilt-Shift

TS-E 17mm f/4L



AL · Float · I/R · UD 4 · SWSC

TS-E 24mm f/3.5L II •f/5.7 •3.2 sec.

TS-E 24mm f/3.5L II •f/4 •1/800 sec. ©Vincent Laforet

TS-E 24mm f/3.5L II

TS-E 45mm f/2.8

TS-E 90mm f/2.8

AL 1 · UD 3 · I/R · SWSC

Float · I/R

Macro

EF 50mm f/2.5 Compact Macro

Float

EF-S 60mm f/2.8 Macro USM*

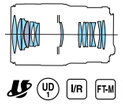
I/R · FT-M · Float

MP-E 65mm f/2.8 1-5x Macro Photo

Float · UD 1

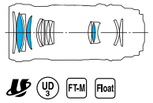
HYBRID IS

EF 100mm f/2.8L Macro IS USM



UD 1 · I/R · FT-M · OIS

EF 180mm f/3.5L Macro USM



UD 2 · FT-M · Float

Life-Size Converter EF

MP-E 65mm f/2.8 1-5x Macro Photo •f/11 •1/125 sec. (3.0x)

Icons: *See "EF Lens Technology" section.* ***Diagram:*** *UD Lens · Aspherical Lens*

** For EOS 7D, 60D, 50D, 40D, 30D, 20D/20Da, Rebel T3i, T2i, T3, T1i, XSi, XS and all versions of EOS Digital Rebel only.*

EF Lens Chart

CANON EF LENS SPECIFICATIONS	Apparent Focal length (mm)		Focus Drive	Angle of View (Diagonal)			Lens Construction (Groups/ Elements)	Minimum Aperture (f)	Filter Diameter (mm)	Closest Focusing Distance		Length		Weight		Lens Hood	Lens Cap	Soft Case
	APS-C	APS-H		35mm	APS-C	APS-H				(ft.)	(m)	(in.)	(mm)	(oz.)	(g)			
Ultra Wide Zoom																		
EF 8-15mm f/4L Fisheye USM	12.8–24	1	Ultrasonic	180°0′–175°30′	180° @ approx.10mm	180° @ approx.12mm	14/11	22	Gelatin	0.49	0.15	3.3	83	19.1	540	EW–77	8–15	LP1219
• EF-S 10-22mm f/3.5-4.5 USM ††	16–35	N/A	Ultrasonic	N/A	107°30′–63°30′	N/A	10/13	22	77	0.8	0.24	3–1/2	89.8	13.6	385	EW–83E	E–77U	LP1319
• EF 16-35mm f/2.8L II USM	26–56	21–45	Ultrasonic	108°10′–63°	80°56′–42°36′	93°08′–51°32′	12/16	22	82	0.92	0.28	4–2/5	111.6	22.4	635	EW–88	E–82U	LP1319
EF 16-35mm f/2.8L USM †	26–56	21–45	Ultrasonic	108°10′–63°	80°56′–42°36′	93°08′–51°32′	10/14	22	77	0.9	0.28	4-1/8	103	1.3 lbs.	600	EW-83E	E–77U	LP1319
EF 17-35mm f/2.8L USM †	–	–	Ultrasonic	104°–63°	78°30′–42°36′	89°39′–51°32′	10/15	22	77	1.38	0.42	3–3/4	95.7	19.1	545	EW–83C	E–77U	–
• EF 17-40mm f/4L USM	27–64	22–52	Ultrasonic	104°–57°30′	78°30′–37°41′	89°39′–45°48′	9/12	22	77	0.92	0.28	3–3/4	96.8	1.1 lbs.	475	EW–83E	E–77U	LP1319
EF 20-35mm f/2.8 USM †	–	–	AFD	94°–63°	78°37′–42°36′	80°23′–51°32′	12/15	22	72	1.6	0.5	3–1/2	89.0	1.2 lbs.	540	EW–75	–	–
• EF 20-35mm f/3.5-4.5 USM †	32–56	26–46	Ultrasonic	94°–63°	68°37′–42°36′	80°23′–51°32′	11/12	22-27	77	1.1	0.34	2–3/4	68.9	11.9	340	EW–83II	E–77U	LP1214
Standard Zoom																		
• EF-S 15-85mm f/3.5-5.6 IS USM ††	124–136	N/A	Ultrasonic	N/A	84°30′–18°25′	N/A	12/17	36	72	1.15	0.35	3–7/16	87.5	20.3	575	EW–78E	E-72U	LP1116
• EF-S 17-55mm f/2.8 IS USM ††	27–88	N/A	Ultrasonic	N/A	78°30′–27°50′	N/A	12/19	22	77	1.5	0.45	4–2/5	110.6	22.8	645	EW–83J	E-77U	–
• EF-S 17-85mm f/4-5.6 IS USM ††	27–136	N/A	Ultrasonic	N/A	78°30′–18°25′	N/A	12/17	22	67	1.1	0.35	3–5/8	92.0	1.1 lbs.	475	EW–73B	E–67U	LP1116
• EF-S 18-55mm f/3.5-5.6 IS† / II ††	29–88	N/A	MM	N/A	74°20′–27°50′	N/A	9/11	22	58	0.82	0.25	2–3/4	68.5	7.8	200	EW-60C	E–58	LP814
• EF-S 18-55mm f/3.5-5.6 USM † / ††	29–88	N/A	Ultrasonic	N/A	74°20′–27°50′	N/A	9/11	22–38	58	0.92	0.28	2–5/8	66.2	6.7	190	EW-60C	E–58U	LP814
• EF-S 18-55mm f/3.5-5.6 †† ****	29–88	N/A	MM	N/A	74°20′–27°50′	N/A	9/11	22–38	58	0.92	0.28	2–5/8	66.2	6.7	190	EW-60C	E–58U	LP814
• EF-S 18-135mm f/3.5-5.6 IS ††	29–216	N/A	MM	N/A	74°20′–11°30′	N/A	12/16	36	67	1.5	0.45	4	101	16.0	4555	EW–73B	E–67	LP1116
• EF-S 18-200mm f/3.5-5.6 IS ††	29–320	N/A	DC motor	N/A	74°20′–07°48′	N/A	12/16	22-36	72	1.5	0.45	4	102	21.0	595	EW–78D	E–72	LP1116
EF 22-55mm f/4-5.6 USM †	–	–	Ultrasonic	88°56′–42°52′	63°38′–27°52′	75°03′–34°09′	9/9	22–32	58	–	0.35	–	–	–	175	–	–	–
• EF 24-70mm f/2.8L USM	38–112	31–91	Ultrasonic	84°–34°	59°15′–22°04′	70°18′–27°08′	13/16	22	77	1.25	0.38	4–7/8	123.5	2.1 lbs.	950	EW–83F	E–77U	LP1219
• EF 24-85mm f/3.5-4.5 USM †	38–136	31–111	Ultrasonic	84°–28°30′	59°15′–18°14′	70°18′–22°29′	12/15	22–32	67	1.6	0.5	2–3/4	69.5	13.4	380	EW–73II	E–67U	LP1014
• EF 24-105mm f/4L IS USM	38–168	31–136	Ultrasonic	84°–23°20′	59°15′–14°48′	70°18′–18°17′	13/18	22–27	77	1.5	0.45	3–5/16	83.5	1.5 lbs.	670	EW–83H	E–77U	LP1219
EF 28-70mm f/2.8 L USM †	–	–	Ultrasonic	75°–34°	51°58′–22°04′	62°13′–27°08′	11/16	22	77	1.6	0.5	4–5/8	117.6	1.9 lbs.	880	EW–83B	E–77U	–
EF 28-70mm f/3.5-4.5 †	–	–	MM	75°–34°	51°58′–22°04′	62°13′–27°08′	9/10	29	52	–	0.39	–	–	–	300	–	–	–
EF 28-80mm f/3.5-5.6 N USM † / V USM †	45–128	36–104	Ultrasonic	75°–30°	51°58′–19°21′	62°13′–25°51′	10/10	22–38	58	1.25	0.38	2–13/16	71.2	7.8	200	EW-60C	E–58	LP814
EF 28-80mm f/3.5-5.6 III † / II †	45–128	36–104	MM	75°–30°	51°58′–19°21′	62°13′–25°51′	10/10	22–38	58	1.25	0.38	2–13/16	71.2	7.8	200	EW-60C	E–58	LP814
EF 28-80mm f/3.5-5.6 †	45–128	36–104	MM	75°–30°	51°58′–19°21′	62°13′–25°51′	10/10	22–38	58	1.25	0.38	2–13/16	71.2	7.8	200	EW-60C	E–58	LP814
• EF 28-90mm f/4-5.6 III † / II USM †	45–144	36–117	MM/Ultrasonic	75°–27°	51°58′–17°14′	62°13′–21°16′	8/10	22–32	58	1.3	0.38	2–13/16	71.0	6.7	190	EW-60C	E–58U/E-58	LP814
• EF 28-90mm f/4-5.6 USM †	45–144	36–117	Ultrasonic	75°–27°	51°58′–17°14′	62°13′–21°16′	8/10	22–32	58	1.3	0.38	2–13/16	71.0	6.7	190	EW-60C	E–58	LP814
• EF 28-105mm f/3.5-4.5 II USM / USM †	45–168	36–136	Ultrasonic	75°–23°20′	51°58′–14°48′	62°13′–18°17′	12/15	22–27	58	1.6	0.5	3	75.0	13.1	375	EW-63II	E–58U	LP814
• EF 28-105mm f/4-5.6 USM †	45–168	36–136	Ultrasonic	75°–23°20′	51°58′–14°48′	62°13′–18°17′	9/10	22–32	58	1.57	0.48	2–11/16	68.0	7.4	210	EW–63B	E–58U	LP814
• EF 28-135mm f/3.5-5.6 IS USM	42–216	36–176	Ultrasonic	75°–18°	51°58′–11°32′	62°13′–14°16′	12/16	22–36	72	1.64	0.5	3–13/16	96.8	1.2 lbs.	540	EW–78BII	E–72U	LP1116
• EF 28-200mm f/3.5-5.6 USM †	45–320	36–260	Ultrasonic	75°–12°	51°58′–07°48′	62°13′–09°39′	12/16	22–36	72	1.5	0.45	3–1/2	89.6	1.1 lbs.	500	EW–78D	E–72U	LP1116
• EF 35-80mm f/4-5.6 III † / II / USM †	56–128	46–104	MM	63°–30°	42°36′–19°21′	51°32′–23°51′	8/8	22–32	52	1.3	0.4	2–1/2	63.5	6.2	175	EW–54II	E–52	LP814
• EF 35-135mm f/4-5.6 USM †	–	–	Ultrasonic	63°–18°	42°36′–11°32′	51°32′–14°16′	12/14	22–32	58	2.5	0.75	3–3/8	86.0	15.0	425	EW–62	–	–
Telephoto Zoom																		
• EF 28-300mm f/3.5-5.6L IS USM	45–480	36–390	Ultrasonic	75°–8°15′	51°58′–5°12′	62°13′–06°26′	16/22	38	77	2.3	0.7	7–1/4	184.0	3.7 lbs.	1,670	EW–83G	E–77U	LZ1324
EF 35-350mm f/3.5-5.6L USM †	–	–	Ultrasonic	63°–07°03′	42°36′–04°28′	51°32′–05°31′	15/21	22–32	72	2.0	0.6	6–9/16	167	3.0 lbs.	1,385	EW–78	E–72U	–
EF 55-200mm f/4.5-6.8 II USM † / USM †	88–320	72–260	Ultrasonic	72–260	27°–07°48′	34°09′–09°39′	13/13	22–29	52	3.9	1.2	3–13/16	97.3	10.9	310	ET–54	E–52U	LP1016
• EF-S 55-250mm f/4-5.6 IS † / II ††	88–400	N/A	DC motor	N/A	27°5′–6°15′	N/A	10/12	22–32	58	3.6	1.1	4.3	108	13.8	390	ET–60	E–58	LP1019
• EF 70-200mm f/2.8L IS II USM	112-320	91-260	Ultrasonic	34°-12°	22°04′–07°48′	27°08′–09°39′	19/23	32	77	3.9	1.2	7.8	199	3.3 lbs	1,490	ET–87	E–77U	LZ1326
• EF 70-200mm f/2.8L USM † / USM	112–320	91–260	Ultrasonic	34°–12°	22°04′–07°48′	27°08′–09°39′	18/23	32	77	4.6	1.4	7–13/16	197.0	3.2 lbs.	1,470	ET–86	E–77U	LZ1324
• EF 70-200mm f/4L IS USM	112–320	91–260	Ultrasonic	34°–12°	22°04′–07°48′	27°08′–09°39′	15/20	32	67	3.9	1.2	6–7/8	172.0	26.8	760	ET–74	E–67U	LP1224
• EF 70-200mm f/4L USM	112–320	91–260	Ultrasonic	34°–12°	22°04′–07°48′	27°08′–09°39′	13/16	32	67	3.9	1.2	6–7/8	172.0	19.2	705	ET–74	E–67U	LP1224
EF 70-300mm f/4-5.6L IS USM *****	112–480	91–390	Ultrasonic	34°–8°15′	22°04′–05°12′	27°08′–06°26′	19/14	32	67	3.9	1.2	5.6	143	27.8	788	ET-73B	E-67U	LP1424
• EF 70-300mm f/4.5-5.6 DO IS USM	112–480	91–390	Ultrasonic	34°–8°15′	22°04′–05°12′	27°08′–06°26′	12/18	32–38	58	4.6	1.4	3–7/8	99.0	1.6 lbs.	720	ET–65B	E–58U	LP1116
• EF 70-300mm f/4–5.6 IS USM	112–480	91–390	Ultrasonic	34°–8°15′	22°04′–05°12′	27°08′–06°26′	10/15	32–45	58	4.9	1.5	5–7/16	137.2	1.4 lbs.	630	ET–65B	E–58U	LP1222
EF 75-300mm f/4–5.6 IS USM †	120–480	98–390	Ultrasonic	32°11′–8°15′	20°37′–05°12′	25°23′–06°26′	10/15	32–45	58	4.9	1.5	5–7/16	137.2	1.4 lbs.	650	ET–64II	E–58U	LP1022
• EF 75-300mm f/4-5.6 III USM/III/II USM †	120–480	98–390	MM/Ultrasonic	32°11′–8°15′	20°37′–05°12′	25°23′–06°26′	9/13	32–45	58	4.9	1.5	4–13/16	122.0	1.1 lbs.	480	ET–60	E–58U	LP1019
EF 75-300mm f/4-5.6 USM	120–480	98–390	Ultrasonic	32°11′–8°15′	20°37′–05°12′	25°23′–06°26′	10/15	32–45	58	4.9	1.5	5–7/16	137.2	1.4 lbs.	650	ET–64II	E–58U	LP1022
EF 80-200mm f/2.8L †	–	–	AFD	30°–12°	19°21′–07°48′	25°31′–09°39′	13/16	32	72	5.9	1.8	7–5/16	186	2.9 lbs.	1330	ES–79	–	–
• EF 80-200mm f/4.5-5.6 II † / USM †	128–320	104–260	MM/Ultrasonic	30°–12°	19°21′–07°48′	25°31′–09°39′	7/10	22–27	52	4.9	1.5	3–1/8	78.5	8.8	250	ET–54	E–52	LP1014
EF 100-300mm f/4.5-5.6 USM †	160–480	130–390	Ultrasonic	24°–8°15′	15°32′–05°12′	19°11′–06°26′	10/13	32–38	58	4.9	1.5	4–3/4	121.5	1.2 lbs.	540	ET–65III	E–58U	LP1019
• EF 100-300mm f/5.6 L †	–	–	AFD	24°–8°15′	15°32′–05°12′	19°11′–06°26′	10/15	32	58	4.6	1.4	6–9/16	167	1.5 lbs.	695	ET–62II	–	–
EF 100-400mm f/4.5-5.6L IS USM	160–640	130–520	Ultrasonic	24°–6°10′	15°32′–03°54′	19°11′–04°50′	14/17	32–38	77	5.9	1.8	7–7/16	189.0	3.0 lbs.	1,360	ET–83C	E–77U	LZ1324
Wide-Angle																		
• EF 14mm f/2.8L II USM	22	18	Ultrasonic	114°	88°32′	100°43′	11/14	22	Gelatin	0.66	0.2	–3/4	116.0	22.8	645	Built-in	Exclusive	LP1016
• EF 14mm f/2.8L USM †	22	18	Ultrasonic	114°	88°32′	100°43′	10/14	22	Gelatin	0.8	0.25	3–1/2	89.0	1.2 lbs.	560	Built-in	Exclusive	LP1016
EF 15mm f/2.8 Fisheye †	24	20	AFD	180°	108°15′	137°08′	7/8	22	Gelatin	0.7	0.2	2–7/16	62.2	11.6	330	Built-in	E–73	LP814
• EF 20mm f/2.8 USM	32	26	Ultrasonic	94°	68°37′	80°23′	9/11	22	72	0.8	0.25	2–13/16	70.6	14.3	405	EW–75II	E–72U	LP1214
• EF 24mm f/1.4L II USM	38	31	Ultrasonic	84°	59°15′	70°18′	10/13	22	77	0.8	0.25	3.4	86.9	22.9	650	EW–83K	E–77U	LP1319
• EF 24mm f/1.4L USM †	38	31	Ultrasonic	84°	59°15′	70°18′	9/11	22	77	0.82	0.25	3	77.4	1.2 lbs.	550	EW–83DII	E–77U	LP1214
EF 24mm f/2.8	38	31	AFD	84°	59°15′	70°18′	10/10	22	58	0.8	0.25	1–7/8	48.5	9.5	270	EW–60II	E–58	LP811
• EF 28mm f/1.8 USM	45	36	Ultrasonic	75°	51°58′	62°13′	9/10	22	58	0.8	0.25	2–3/16	55.6	10.9	310	EW–63II	E–58U	LP814
EF 28mm f/2.8	45	36	AFD	75°	51°58′	62°13′	5/5	22	52	1.0	0.3	1–11/16	42.5	6.5	185	EW–65II	E–52	LP1011
• EF 35mm f/1.4L USM	56	45	Ultrasonic	63°	42°36′	51°32′	9/11	22	72	0.98	0.3	3–2/5	86.0	1.3 lbs.	580	EW–78C	E–72U	LP1214
EF 35mm f/2	56	45	AFD	63°	42°36′	51°32′	5/7	22	52	0.8	0.25	1–11/16	42.5	7.4	210	EW–65II	E–52	LP1011

CANON EF LENS SPECIFICATIONS	Apparent Focal length (mm)		Focus Drive	Angle of View (Diagonal)			Lens Construction (Groups/ Elements)	Minimum Aperture (f)	Filter Diameter (mm)	Closest Focusing Distance		Length		Weight		Lens Hood	Lens Cap	Soft Case
	APS-C	APS-H		35mm	APS-C	APS-H				(ft.)	(m)	(in.)	(mm)	(oz.)	(g)			
Standard & Medium Telephoto																		
EF 50mm f/1.0L USM †	–	–	Ultrasonic	46°	30°32′	37°21′	9/11	16	–	2.0	0.6	3–3/16	81.5	2.2 lbs.	985	ES–79	E–72U	–
• EF 50mm f/1.2L USM	80	65	Ultrasonic	46°	30°32′	37°21′	6/8	16	72	1.5	0.45	2.58	65.5	18.7	580	ES–78	E–72U	LP1214
EF 50mm f/1.4 USM	80	65	Ultrasonic	46°	30°32′	37°21′	6/7	22	58	1.5	0.45	2	50.5	10.2	290	ES–71II	E–58U	LP1014
EF 50mm f/1.8 II	80	65	MM	46°	30°32′	37°21′	5/6	22	52	1.5	0.45	1–5/8	41.0	4.6	130	ES–62#	E–52	LP1014
EF 50mm f/1.8 †	80	65	MM	46°	30°32′	37°21′	5/6	22	52	1.5	0.45	1–5/8	41.0	4.6	130	ES–62#	E–52	LP1014
• EF 85mm f/1.2L II USM / USM †	136	111	Ultrasonic	28°30′	18°14′	22°29′	7/8	16	72	3.2	0.95	3–5/16	84.0	2.3 lbs.	1,025	ES–79II	E–72U	LP1219
• EF 85mm f/1.8 USM	136	111	Ultrasonic	28°30′	18°14′	22°29′	7/9	22	58	2.8	0.85	2–13/16	71.5	15.0	425	ET–65III	E–58U	LP1014
• EF 100mm f/2 USM	160	130	Ultrasonic	24°	15°32′	19°11′	6/8	22	58	3.0	0.9	2–7/8	73.5	1.0 lbs.	460	ET–65III	E–58U	LP1014
Telephoto																		
• EF 135mm f/2L USM	216	175	Ultrasonic	18°	11°32′	14°16′	8/10	32	72	3.0	0.9	4–7/16	112.0	1.6 lbs.	750	ET–78II	E–72U	LP1219
EF 135mm f/2.8 w/ Softfocus	216	175	AFD	18°	11°32′	14°16′	6/7	32	52	4.3	1.3	3–7/8	98.4	13.8	390	ET–65III	E–52	LP1016
EF 200mm f/1.8L USM †	–	–	Ultrasonic	12°	07°48′	09°39′	10/12	32	48 DI	8.2	2.5	8–3/16	208	6.6 lbs.	3,000	ET–123	E–162	–
• EF 200mm f/2L IS USM	320	260	Ultrasonic	12°	07°48′	09°39′	12/17	32	52 DI	6.2	1.9	8–3/16	208	5.6 lbs.	2,520	ET–120B	E–145B	–
• EF 200mm f/2.8L II USM / USM †	320	260	Ultrasonic	12°	07°48′	09°39′	7/9	32	72	4.9	1.5	5–3/8	136.2	1.6 lbs.	765	ET–83BII	E–72U	LP1222
EF 300mm f/2.8L IS II USM	480	390	Ultrasonic	8°15′	05°12′	06°26′	16/12	32	52 DI	6.6	2.0	9.7	247.5	5.25lbs.	2,400	ET–120WII	E–145C	300B
• EF 300mm f/2.8L IS USM † / USM †	480	390	Ultrasonic	8°15′	05°12′	06°26′	13/17	32	52 DI	8.2	2.5	9–7/8	252.0	5.6 lbs.	2,550	ET–120	E–145	–
• EF 300mm f/4L IS USM / USM †	480	390	Ultrasonic	8°15′	05°12′	06°26′	11/15	32	77	4.9	1.5	8–11/16	221.0	2.6 lbs.	1,190	Built-in	E–77U	LZ1128
Super Telephoto																		
EF 400mm f/2.8L IS II USM	640	520	Ultrasonic	6°10′	03°54′	04°50′	16/12	32	52 DI	8.86	2.7	13.5	343	9.25 lbs.	4,200	ET–155WII	E–180D	400C
• EF 400mm f/2.8L IS USM †/ II USM †/ USM †	640	520	Ultrasonic	6°10′	03°54′	04°50′	13/17	32	52 DI	9.8	3.0	13–11/16	349.0	11.7 lbs.	5,300	ET–155	E–180C	–
• EF 400mm f/4 DO IS USM	640	520	Ultrasonic	6°10′	03°54′	04°50′	13/17	32	52 DI	11.48	3.5	9–7/16	232.7	4.3 lbs.	1,940	ET–120	E–145 II	–
• EF 400mm f/5.6L USM	640	520	Ultrasonic	6°10′	03°54′	04°50′	6/7	32	77 DI	11.5	3.5	10–1/16	256.5	2.8 lbs.	1,250	Built-in	E–77U	LZ1132
NEW EF 500mm f/4L IS II USM	800	650	Ultrasonic	5°	03°07′	03°52′	16/12	32	52 DI	12.14	3.7	15.1	383	112.5 oz.	3190	ET–138	E–163B	500B
• EF 500mm f/4L IS USM †	800	650	Ultrasonic	5°	03°07′	03°52′	13/17	32	52 DI	14.8	4.5	15–3/16	387.0	8.5 lbs.	3,870	ET–138	E–163	–
EF 500mm f/4.5L USM †	–	–	Ultrasonic	5°	03°07′	03°52′	6/7	32	48 DI	16.4	5.0	15–3/8	390	6.6 lbs.	3,000	ET–123BII	E–130	–
NEW EF 600mm f/4L IS II USM	960	780	Ultrasonic	4°10′	02°36′	03°13′	16/12	32	52 DI	14.77	4.5	17.6	448	138.3 oz.	3920	ET–160	E–185B	600B
• EF 600mm f/4L IS USM † / USM †	960	780	Ultrasonic	4°10′	02°36′	03°13′	13/17	32	52 DI	18.0	5.5	18	456.0	11.8 lbs.	5,360	ET–160	E–185	–
• EF 800mm f/5.6L IS USM	1,280	1,040	Ultrasonic	3°5′	01°57′	02°25′	14/18	32	52 DI	19.69	6.0	18.1	461.0	9.9 lbs.	4,500	ET–155	E–180C	–
• EF 1200mm f/5.6L USM †	1,920	1,560	Ultrasonic	2°5′	01°18′	01°36′	10/13	32	48 DI	45.9	14.0	33	836.0	36.4 lbs.	16,50	Built-in	Exclusive	–
Macro																		
EF 50mm f/2.5 Compact Macro	80	65	AFD	46°	30°32′	37°21′	8/9	32	52	0.8	0.23	2–1/2	63.0	9.9	280	Built-in	E–52	LP814
• EF-S 60mm f/2.8 Macro USM ††	96	N/A	Ultrasonic	N/A	25°	N/A	8/12	32	52	0.65	0.2	2–3/4	69.8	11.8	335	ET–67B	E–52U	LP1016
• MP-E 65mm f/2.8 1-5x Macro Photo *	104	85	Manual	18°40′ (at 1x)	11°51′ (at 1x)	14°39′ (at 1x)	8/10	16	58	0.8	0.24	3–7/8	98.0	1.6 lbs.	730	–	E–58	LP1216
• EF 100mm f/2.8L Macro IS USM	160	130	Ultrasonic	23.4°	15°7′	19°12′	12/15	32	67	0.97	0.3	4–13/16	123.0	1.4 lbs.	625	ET–73	E–67U	LP1219
• EF 100mm f/2.8 Macro USM	160	130	Ultrasonic	24°	15°32′	19°11′	8/12	32	58	1.0	0.31	4–11/16	119.0	1.3 lbs.	600	ET–67	E–58U	LZ1324
• EF 180mm f/3.5L Macro USM	288	234	Ultrasonic	13°40′	08°40′	10°43′	12/14	32	72	1.6	0.48	7–3/8	186.6	2.4 lbs.	1,090	ET–78II	E–72U	LZ1324
Life Size Converter EF ***	–	–	–	–	–	–	3/4	–	–	0.8	0.24	1–3/8	34.9	5.6	160	–	R–F–3	LP811
Tilt-Shift																		
• TS-E 17mm f/4L*	27	22	Manual	104°	78°30′	89°39′	13/18	22	–	0.82	0.25	4.20	106.7	1.8 lbs.	820	–	17	LP1219
• TS-E 24mm f/3.5L II *	38	31	Manual	84°	59°15′	70°18′	10/16	22	82	0.69	0.21	4.20	106.9	1.7 lbs.	780	EW–88B	E–82	LP1319
TS-E 24mm f/3.5L † *	38	31	Manual	84°	59°15′	70°18′	9/11	22	72	1.0	0.3	3–7/16	87.0	1.2 lbs.	570	EW–75BII	E–72	LP1216
TS-E 45mm f/2.8 *	72	59	Manual	51°	33°44′	41°10′	9/10	22	72	1.3	0.4	3–9/16	90.0	1.4 lbs.	645	EW–79BII	E–72	LP1216
TS-E 90mm f/2.8 *	144	117	Manual	27°	17°14′	21°16′	5/6	32	58	1.6	0.5	3–7/16	88.0	1.2 lbs.	565	ES–65III	E–58	LP1016
Extenders																		
Extender EF 1.4x III **	–	–	–	–	–	–	7/3	–	–	–	–	1–1/16	27.2	7.9	225	–	Extender Cap E II	LP811
Extender EF 1.4x II † **	–	–	–	–	–	–	5/4	–	–	–	–	1–1/16	27.2	7.8	220	–	Extender Cap E II	LP811
Extender EF 2x III **	–	–	–	–	–	–	9/5	–	–	–	–	2–5/16	52.7	11.5	325	–	Extender Cap E II	LP811
Extender EF 2x II † **	–	–	–	–	–	–	7/5	–	–	–	–	2–5/16	103	9.3	265	–	Extender Cap E II	LP811

† Discontinued. †† Compatible only with EOS 7D, 60D 50D, 40D, 30D, 20D/20Da. Rebel T3i/T2i/T3/T1i/XSi/XS and Digital Rebel XTi/XT only. • Incorporates distance information with E-TTL II. * TS-E AND MP-E lenses are manual focus only, with automatic diagram. ** Extenders EF 1.4x II/III and 2x II/III are for exclusive use with EF 70-200mm f/2.8L IS II, EF 70-200mm f/2.8L, 70-200mm f/2.8L IS, 70-200mm f/4L, 100-400mm f/4.5-5.6L, 135mm f/2L, 180mm f/3.5L Macro, 200mm f/1.8L, 300mm f/2.8 L, 300mm f/2.8L IS II, 300mm f/4L, 300mm f/4L IS, 400mm f/2.8L IS, 400mm f/2.8L IS II, 400mm f/4 DO, 400mm f/5.6L, 500mm f/4L IS, 600mm f/4L IS, and 1200mm f/5.6L (Manual focus only when EF 1.4x II/III is used with EF 100-400mm f/5.6L, 400mm f/5.6L, 500mm f/4.5L, 1200mm f/5.6L, and with 180mm f/3.5 Macro when focused closer than 2.6 feet; or with Extender EF 2x II/III when used with EF70-200mm f/4L, 100-400mm f/4.5-5.6L, 180mm f/3.5L Macro, 300mm f/4L IS, 300 f/4L, 400mm f/4 DO, 400mm f/5.6L, 500mm f/4L, 500mm f/4.5L, 600mm f/4L, and 1200mm f/5.6L). *** Life Size Converter EF is for exclusive use with 50mm f/2.5 Compact Macro. **** Available only with the EOS 40D, 30D, 20D and Digital Rebel Kit. # With Adapter Ring. Rear Cap for EF lenses = Lens Dust Cap E. Body Cap for EOS Cameras, Life Size Converter EF = Camera Cover R-F-3. Specifications subject to change. ***** Not compatible with tele-extenders.

The Finest Accessories for Your Lenses.

To enhance the stellar features of the EF Lens system, there are a number of accessories designed to perform perfectly with your system. Canon offers cases to help protect your lenses, hoods and filters to help control glare, and a number of adapters to further expand the possibilities of your EF Lenses and your EOS System.

General Purpose

Lens Cases

Lens Hoods

Lens Cases and Lens Hoods

These functional, rugged cases are indispensable to help protect lenses. Lens hoods help prevent unwanted glare from affecting your photographs.

Available Sizes
See EF Lens Specifications.

Haze (UV-1)

Haze (UV-1)

The Haze (UV-1) filter absorbs ultraviolet light and is most effective on sunny days for cutting haze out of the shot.

Type	Available Sizes
Screw-in	67mm, 72mm, 77mm, 82mm

52mm Drop-in
Screw Filter Holder 52WII

Drop-in Screw Filter Holder

A holder for screw-type filters, for use with rear-mounted drop-in filters.

Type	Available Sizes
Drop-in	48mm, 52mm. Includes clear filter. For super-telephoto lenses. Current IS Super-teles—52mm. Previous super-teles without IS—48mm.

Close-up Lenses

With Close-up Lens

250D 500D 500

Close-up Lens 250D/500D/500

The 250D/500D series incorporates double-element achromatic design for maximum optical performance. These screw-in lenses are used to provide a shorter minimum focusing distance with no loss of light. Each lens is optimized for a particular focal length. Manual focus is recommended with these lenses.

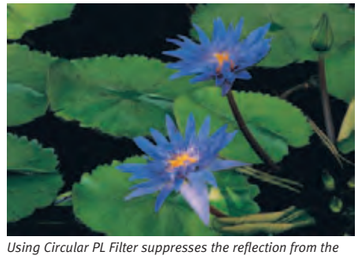
Type	Available Sizes
Screw-in	500D/500: 52mm, 72mm, 77mm. Optimized for lenses 70 thru 300mm. 250D: 52mm, 58mm. Optimized for lenses 50 thru 135mm.

Polarizing Filters

Not using Circular PL Filter

Using Circular PL Filter emphasizes the blue of the sky.

Not using Circular PL Filter



Using Circular PL Filter suppresses the reflection from the surface of the leaves and the surface of the water.

Screw-in

52mm Drop-in
Circular Polarizing
Filter PL-C 52WII

Circular Polarizing Filter PL-CB/PL-C

Polarizing filters enhance picture quality by blocking harmful reflected light. Use it to reduce light reflections from glass and water surfaces or to improve color saturation. Simple to use, these filters polarize light circularly, rather than linearly, so they do not interfere with autofocus or TTL light metering.

DROP-IN — For use with lenses using rear-mounted drop-in filters, this polarizing filter can be rotated from the outside without removing the holder from the lens, helping enable precise control.

Type	Available Sizes
Screw-in	52mm, 58mm, 67mm, 72mm, 77mm, 82mm
Drop-in	48mm, 52mm. For super-telephoto lenses. Current IS Super-teles—52mm. Previous super-teles without IS—48mm.

Softmat Filters

Without Softmat Filter

Use a Softmat Filter for a soft effect.

Softmat No. 1

Softmat No. 2

Softmat No. 1 & No. 2

Softmat filters mildly soften the focus for flattering portraits and dreamy landscapes. These filters utilize the effect of diffraction, which occurs between light passing through the transparent part and light passing through the coated part. Use Softmat No. 1 filter for a gentle soft focus effect, and Softmat No. 2 for a stronger effect.

Type	Available Sizes
Screw-in	52mm, 58mm

Extension Tubes

EF 25 II

EF 12 II

Extension Tube EF 25 II & EF 12 II

These close-up accessories are placed between the camera body and lens to help enable high-magnification photography. Eight electronic contact points allow communication between the camera and lens to continue as usual. The magnification differs according to the lens, but for standard zoom lenses it is about 0.3x to 0.5x for the EF 12 and 0.7x or more for the EF 25. By using both tubes effectively, the choice of magnifications can be greatly extended. However, for best results, manual focusing is recommended.

Loupes

Loupe 4x

Loupe 4x

Designed for viewing 35mm film frames at high magnifications, these loupes use a high-performance lens system that help to eliminate all aberration and distortion. They offer diopter adjustment of -4 to +1 dpt, and include an eyecup, hood and case.

Gelatin Filter Holders

Gelatin Filter Hoods IV

Gelatin Filter Holder IV

Gelatin Filter
Holder Adapter IV

Gelatin Filter Hoods III

Gelatin Filter Holder III

Gelatin Filter
Holder Adapter III

Gelatin Filter Holder System

This convenient holder system allows the use of commercially available square filters without the need for cutting. The holder attaches to the lens through an adapter that fits the filter diameter. A special hood is available for use with the system. Use with 3-inch square type III and 4-inch square type IV gelatin filters. Gelatin filters can be used with most EF lenses.

Gelatin Filter Holder III & IV

Type	Available Sizes
Screw-in	Holder for 3-inch square (III) or 4-inch (IV) gelatin filters.

Gelatin Filter Hoods III & IV

Type	Available Sizes
Screw-in	Lens shades which attach to holder can be stacked with telephoto lenses.

Gelatin Filter Holder Adapter III & IV

Type	Available Sizes
Screw-in	III: 52mm, 58mm, 67mm, 72mm, 77mm. IV: 58mm, 67mm, 72mm, 77mm.

Drop-in Gelatin Filter Holder II

Up to three gelatin filters can be placed in these holders. To use, insert a cut piece of gelatin film between the holder's filter frame and pressure clip, and screw on to the lens.

52mm Drop-in
Gelatin Filter Holder 52WII

Type	Available Sizes
Drop-in	48mm, 52mm. For super-telephoto lenses. Current IS Super-teles—52mm. Previous super-teles without IS—48mm.

Extender EF Specifications EF Lens Attachment	with Extender EF 1.4x III attached						with Extender EF 2x III attached					
	Apparent Focal Length (mm)			f-stop (f)	Maximum Magnification	AF	Apparent Focal Length (mm)			f-stop (f)	Maximum Magnification	AF
	35mm	APS-H	APS-C				35mm	APS-H	APS-C			
EF 135mm f/2L USM	189	246	302	2.5–45	0.27	○	270	351	432	4–64	0.38	○
EF 180mm f/3.5L Macro USM	252	328	403	4.5–45	1.4	○*2	360	468	576	6.7–64	2.00	×
EF 200mm f/2.8L II USM	280	364	448	2.5–32	0.22	○	400	520	640	5.6–64	0.32	○
EF 200mm f/2L IS USM	280	364	448	2.8–45	0.18	○	400	520	640	4–64	0.24	○*5
EF 300mm f/2.8L IS II USM	420	546	672	4–45	0.15	○	600	780	960	5.6–64	0.28	○
EF 300mm f/2.8L IS USM	420	546	672	4–45	0.15	○	600	780	960	5.6–64	0.28	○
EF 300mm f/4L IS USM	420	546	672	5.6–45	0.33	○	600	780	960	8–64	0.47	×*3*4
EF 400mm f/2.8L IS II USM	560	728	896	4–45	0.22	○	800	1,040	1,280	5.6–64	0.31	○
EF 400mm f/2.8L IS USM	560	728	896	4–45	0.22	○	800	1,040	1,280	5.6–64	0.31	○
EF 400mm f/4 DO IS USM	560	728	896	5.6–45	0.17	○	800	1,040	1,280	8–64	0.24	×*3*4
EF 400mm f/5.6L USM	560	728	896	8–45	0.18	×*3	800	1,040	1,280	11–64	0.27	×
EF 500mm f/4L IS USM	700	910	1,120	5.6–64	0.17	○	1,000	1,300	1,600	8–90	0.27	×*3*4
EF 500mm f/4L IS II USM	700	910	1,120	5.6–45	0.21	○	1,000	1,300	1,600	8–64	0.31	○*2
EF 600mm f/4L IS USM	840	1,092	1,344	5.6–64	0.17	○	1,200	1,560	1,920	8–90	0.27	×*3*4
EF 600mm f/4L IS II USM	840	1,092	1,344	5.6–45	0.21	○	1,200	1,560	1,920	8–64	0.30	○*2
EF 800mm f/5.6L IS USM	1,120	1,456	1,792	8–45	0.2	×*5	1,600	2,080	2,560	11–64	0.28	×*5
EF 1200mm f/5.6L USM	1,680	2,184	2,688	8–45	0.12	×	2,400	3,120	3,840	11–64	0.27	×
EF 70-200mm f/2.8L IS II USM	98–280	127–364	157–448	4–45	0.22	○	140–400	182–520	224–640	5.6–64	0.44	○
EF 70-200mm f/2.8L USM	98–280	127–364	157–448	4–45	0.22	○	140–400	182–520	224–640	5.6–64	0.44	○
EF 70-200mm f/4L IS USM / USM	98–280	127–364	157–448	5.6–45	0.29	○	140–400	182–520	224–640	8–64	0.42	×*3
EF 100-400mm f/4.5-5.6L IS USM	140–560	182–728	224–896	6.7–54	0.28	×*3*4	200–800	260–1,120	320–1,280	9.5–76	0.40	×*4

For Best Results with Your Canon EOS Camera Use Original Canon EF Lenses.

Each EOS camera body and each EF Lens has its own built-in microcomputer. These microcomputers store a range of special data to ensure the smooth operation of bodies and EF lenses which support two-way digital communications between each part to allow exchange of information. Since the EOS System's market launch in 1987, functions have been added and improved on a continuing basis, such as Optical Image Stabilizer to some lenses, speeding up the AF function, increasing the number of focusing points, and the addition of the Eye Controlled Focus™ Function. As the system's range of functions has evolved, the nature of the basic system of communications between lens and body has evolved as well, ensuring that complete compatibility is maintained. This process of evolution will continue in the future with the addition of more new specifications, resulting in still further gains in reliability. **Accordingly, in order to realize the maximum performance of the EOS System and thereby achieve among the highest possible photographic quality, we recommend that you use Canon EF lenses and Canon brand accessories, since they are designed and manufactured to match the special qualities of your EOS camera.**

*1 If the lens is attached to an EOS camera, having multiple focusing points and an Extender is attached to the lens, only the center focusing point will be useable for AF. *2 The autofocusing range is from 2.6 feet/0.8m to infinity. *3 With the EOS-1Ds Mark III, EOS-1Ds Mark II, EOS-1D Mark III, EOS-1D Mark II, EOS-1Ds, EOS-1D, EOS-1v and EOS-3. AF is possible with the center focusing point only. *4 The Image Stabilizer does not operate with the following cameras: EOS650, 630, 620, 600, RT, 700, 750, 850, EOS-1, A2, A2E, 10s, ELAN, Rebel, Rebel S, Rebel II and Rebel SII. *5 With the EOS-1Ds Mark II, EOS-1Ds, EOS-1D Mark II N, EOS-1D Mark II, EOS-1D, EOS-1v, EOS –1v HS and EOS-3, AF is possible with the center focusing point only.

SPEEDLITE TECHNOLOGY

Integral to the EOS System, Canon Speedlites are the ideal flash source for EOS SLR cameras. They are technologically advanced to provide perfect exposure and illumination with just about any subject, yet operation is remarkably simple. Whether you're an amateur or an expert, Canon Speedlites make it easy to obtain professional results.

Sophisticated Flash Control Modes

E-TTL—In E-TTL (Evaluative Through-The-Lens) flash exposure control mode, meter readings are taken through the lens, but not off the focal plane. Using a preflash fired after the shutter button has been fully depressed—but before the camera's reflex mirror goes up—E-TTL uses the camera's Evaluative metering sensor to compare the ambient light values with the light reflected from the subject by the preflash. The camera then calculates and stores the flash output required for optimum exposure of the main subject (as identified by the AF point) and the background. E-TTL requires the use of EX-series dedicated Speedlites such as the 580EX II, 430EX II, 320EX, 270EX II, MT-24EX, or MR-14EX in combination with a compatible camera.

E-TTL II—Available on Canon's EOS DSLR cameras, E-TTL II incorporates distance information from compatible EF lenses (see page 34 for details) for more versatile flash exposure control. E-TTL II minimizes underexposure that can occur with straight reflections by ignoring sensor areas that report abnormally high levels. This feature is useful when shooting a subject with a highly reflective object in the background, or if the subject itself is highly reflective. In addition, because distance information is used in calculating the flash output level, E-TTL II prevents overexposure when photographers lock focus and recompose.

SLR Compatibility			
Camera Model	**E-TTL**	**E-TTL II**	**A-TTL / TTL**
EOS-1D X	No	Yes†	Not Possible
EOS-1Ds Mark III	No	Yes†	Not Possible
EOS-1D Mark IV	No	Yes†	Not Possible
EOS 5D Mark II	No	Yes†	Not Possible
EOS 7D	No	Yes†	Not Possible
EOS 60D	No	Yes†	Not Possible
EOS 50D	No	Yes†	Not Possible
EOS 40D	No	Yes†	Not Possible
EOS 30D	No	Yes†	Not Possible
EOS Rebel T3i / T3 / T2i / T1i / XSi / XS	No	Yes†	Not Possible
EOS Digital Rebel XTi / XT	No	Yes†	Not Possible
EOS-1v / EOS-3	Yes	No	4-point/3-zone
EOS ELAN 7NE	Yes	Yes	4-point/3-zone
EOS Rebel T2 / T2 Date	No	Yes	Not Possible
EOS Rebel K2 / K2 Date	Yes	No	4-point/3-zone

Speedlite Compatibility				
	E-TTL / E-TTL II	**A-TTL**		
580EX II	Yes††	No	Yes†††	Yes
	Yes††	No		
320EX	Yes††	No	No	Yes
	Yes††	No		
270EX II	Yes††	No	No	No
	Yes††	No		
MR-14EX	Yes††	No	Yes†††	Yes
	Yes††	No		

† Not Linked to AF point. †† Requires EOS body that supports E-TTL and E-TTL II respectively. ††† Defaults to TTL in all conditions except direct flash in the camera's Program mode.

For example, with the EOS-1D Mark IV, the ambient light is first measured using the camera's 63-zone metering when the shutter button is pressed. Next, a preflash is fired and the metering sensor takes readings. The ambient and preflash readings are compared. The metering areas having small differences are selected as the main flash exposure areas. Areas with large discrepancies between ambient and preflash readings are excluded or down-weighted because they are assumed to contain a highly reflective subject, or the subject is not in that part of the frame—an assumption validated by distance information. The algorithm thus helps avoid chronic underexposure problems in such situations. These readings are weighted, averaged, and compared with the ambient light reading and the main flash output is then set and stored in memory.

The E-TTL II, in effect, captures the subject as a "plane" and not as a "point." As a result, EOS SLR cameras can help deliver consistent flash exposures even if the subject contains various colors and levels of reflection. The camera also allows the user to select an averaged metering pattern through custom function settings.

TTL*—TTL (Through-The-Lens) is the standard flash exposure control mode used by the built-in flash units that come with some 35mm EOS film cameras. Unlike E-TTL or E-TTL II, TTL reads flash illumination reflected from the film during the exposure. When the camera is set to Program AE mode, TTL flash sets an aperture based on the ambient light level.

Flash Exposure Lock (FE Lock)

FE Lock adds Auto Exposure lock and Spot metering functions when shooting with EX-series Speedlites and E-TTL compatible EOS cameras. The EX-series Speedlite's preflash fires when the camera's AE Lock button is depressed, storing a Spot meter reading of flash and ambient lighting data for up to 16 seconds. This provides enough time to not only recompose the shot, but also alter the ambient light exposure for maximum creative control. FE Lock is extremely useful when you wish to recompose after focus lock or to place the main subject in a part of the frame not covered by one of the focusing points. It can also eliminate potential exposure errors caused by unwanted reflections from surfaces like windows or mirrors.

Adjusting Ambient Exposure in FE Lock**—**After preflashing the subject with the FE Lock button, ambient exposure can be adjusted by turning the Quick Control Dial. The ambient exposure level is displayed on the exposure level scale in the viewfinder and on the external LCD panel.

FP Mode***

FP (focal-plane) flash, or High-speed Sync, enables E-TTL and E-TTL II compatible cameras equipped with an EX-series Speedlite to synchronize flash at shutter speeds faster than the camera's normal maximum sync speed. Even in bright daylight, for example, a fast lens can be used at a wide aperture to reduce depth-of-field and emphasize the subject. FP flash can be combined with E-TTL, E-TTL II, or FE Lock, and is available in all AE modes plus Manual.

Flash Exposure Compensation****

This setting adjusts flash output without changing the shutter speed or aperture. It's a particularly effective way to fine-tune the balance between foreground and background exposure for fill flash shots, but it can also be used to compensate for extremely bright or dark tones in the subject.

Taken with MT-24EX and EOS-1v HS

***High-Speed Sync** — EF 135mm f/2.0L USM lens •f/2 •1/750 sec.*

Second-Curtain Sync

Instead of firing the instant the shutter opens, Second-Curtain Sync fires the flash at the end of the exposure, allowing streaks of light to flow naturally behind a moving subject. This creative flash mode is most effective with slower shutter speeds and subjects with light sources, such as the headlights of a moving car.

Stroboscopic Flash

Stroboscopic flash is a series of flashes fired in rapid succession during a single exposure. With stroboscopic flash, multiple images of a moving subject appear in the photograph. Using this mode, you can analyze a golf swing or record the shattering of a windowpane. (Available with Speedlite 580EX II, Macro Ring Lite MR-14EX, Macro Twin Lite MT-24EX, and the built-in flash of the EOS 7D).

LED Light

In a first for Canon Speedlite flashes, the 320EX features a bright, built-in LED light for illumination when shooting video or for use as a modelling light. With fully charged AA batteries, the LED light can last for up to four hours of continuous use.

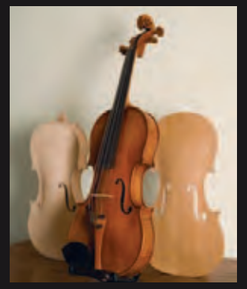
Flash Release Function

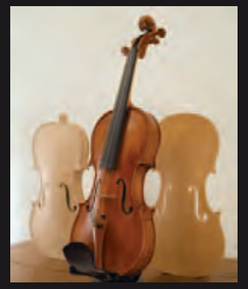
Select Speedlite models include a convenient feature that enables photographers to release the camera shutter from the remote flash wirelessly with a 2-second delay. With EOS DSLR cameras that provide a master function with remote reception mode, this feature makes it possible to reposition the flash with complete freedom – even out of the camera's line-of-sight and at some distance from the camera.

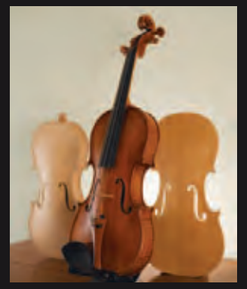
**ATTL and TTL are not compatible with DSLR cameras. See lens chart for a listing of lenses that supply distance information. **Ambient exposure cannot be adjusted when the camera is set to Bulb mode or in low-light situations when the camera is set to Program AE or A-DEP. ***Unlike conventional electronic flash, FP flash output (guide number) decreases as shutter speed increases above normal X-sync speed. ****Flash exposure compensation can be set with most current Speedlites, and it can also be set with all current EOS cameras other than the EOS Rebel series and EOS Digital Rebel.*

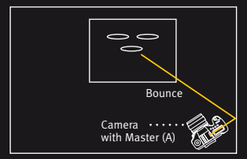
Wireless Flash Photography

Canon's EX series Speedlites have made multiple-flash photography simple, wireless and automatic. Using the Speedlite 580EX II, Macro Speedlite MR-14EX, Macro Twin Lite MT-24EX, or the Speedlite Transmitter ST-E2 as a master unit, wireless signals are transmitted to an unlimited number of Speedlites 580EX II or 430EX II, creating myriad possibilities for lighting, no matter the location. For the ultimate convenience, the EOS 7D, EOS 60D and EOS Rebel T3i have an Integrated Speedlite Transmitter, which has the transmitting features of the Speedlite 580EX II, allowing users to wirelessly control EX series Speedlites and doing away with the need for an external master unit.

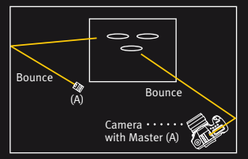




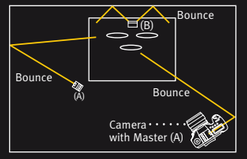




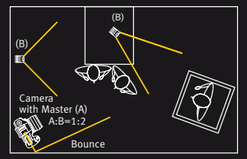
1. Set up the main flash unit – *To prevent the strong shadows a direct flash would produce, the main flash was bounced off a wall near the camera to soften the lighting.*



2. Add an auxiliary flash unit – *Remaining shadows were weakened by bouncing an auxiliary flash (A) off another wall to hit the subjects from a direction opposite that of the main flash unit.*



3. Add another auxiliary flash unit – *To improve gradation and contrast, another auxiliary flash unit (B) was set up behind the subjects. Its light was bounced off the back wall to accent key details of the image.*



Sample Photo Analysis – *Three flash units provided illumination. The light from the master flash unit (A), a Speedlite 580EX II mounted on the camera, was bounced off the wall to soften its intensity before reaching the two violin makers. A slave 580EX II (B) was set far enough away on a desk to be pointed directly at the statue, and another 580EX II (B) was used to light up the overall office. Based on the results displayed on the camera's LCD monitor, the brightness of the master flash unit was halved to achieve natural lighting.*

E-TTL/E-TTL II Wireless Autoflash Control

Up to three groups (for main, fill and background) of slave units can be set up for comprehensive control of flash lighting. The Speedlite slave units can be assigned to group A, B, or C, with output ratio between groups A and B adjustable from 8:1 to 1:1 or 1:1 to 1:8. The output of the group C can be adjusted through flash exposure compensation. Superb lighting is simple thanks to the E-TTL/E-TTL II autoflash system which controls the total flash output to ensure consistently correct exposure. The EOS 7D, EOS 60D and EOS Rebel T3i, with their Integrated Speedlite Transmitters, can control and trigger external Speedlites wirelessly through their built-in pop up flash. The EOS 60D can wirelessly control the ratio between A and B groups, along with the built-in unit's own output, while the EOS 7D can control A, B, and C groups. Both cameras also feature a modeling flash feature for previewing the output of your external Speedlites, available by pressing the depth of field button. Even with multiple Speedlites, the modeling flash fires according to the ratios you have set. E-TTL/E-TTL II wireless autoflash also supports most other Speedlite features, such as FE Lock, FP Flash, Flash Exposure Bracketing/Compensation, and Stroboscopic Flash. Finally, for macro shooting, the Macro Ring Lite MR-14EX and Macro Twin Lite MT-24EX can be used as master units as well.

Amazing Flash System

Canon offers a full range of Speedlite flash units compatible with EOS System cameras for a wide variety of applications and photographers' needs. They range from simple, economical flashes to high-power, highly advanced Speedlites for professional use.

Speedlites

Speedlite 580EX II

- Auto conversion of flash coverage with compatible EOS digital SLR cameras.*
- Superb evenness of exposure, center to corner of frame.
- Higher max. Guide No. at 105mm setting (190 ft./58m at ISO 100).
- White Balance info communicated instantly to compatible EOS DSLR cameras.*
- Full swivel, 180˚ in either direction.
- AF-assist beam compatible with all AF points on every EOS SLR.
- Dust- and water-resistance to match the EOS-1D X, 1Ds Mark III, 1D Mark IV.

Speedlite 430EX II

- Superb build quality, including a metal foot for added strength.
- Approx. 20% faster recycle time, compared to previous 430EX.
- One-touch quick-lock mechanism for easy attaching/detaching flash from camera.
- Full flash control possible on camera menu, with compatible EOS DSLR cameras.
- Virtually silent flash recycle.
- Full 180˚ swivel in either direction.
- Zoom flash head covers range of 24–105mm; max. Guide No. 141 ft./43m at ISO 100.

Speedlite 320EX

- Built-in LED illuminates nearby subjects in dim light – especially useful for video.
- Versatile vertical and horizontal bounce capability.
- Flash release function allows wireless shutter release from the flash with a 2-second delay for flash repositioning.
- Wireless Slave function supports three groups and four channels.
- Two flash coverage settings, selectable by extending or retracting flash head.
- Max. Guide No. at Tele setting: 105 ft./32m at ISO 100.
- Fast recycle time of approximately 2.0 seconds.

Speedlite 270EX II

- Ultra-compact, ultra-lightweight flash unit.
- Vertical bounce capability up to 90 degrees.
- Flash release function allows wireless shutter release from the flash with a 2-second delay for flash repositioning.
- Slave function allows the flash to be triggered wirelessly.
- Flash coverage can be switched between Normal and Tele settings.
- Max. Guide No. at Tele setting: 89 ft./27m at ISO 100.

** Feature compatible with EOS-1D X, 1Ds Mark III, 1D Mark IV, 1D Mark III, 1Ds Mark II, 1D Mark II N, 1D Mark II, 5D Mark II, 5D, 7D, 60D, 50D, 40D, 30D, 20D, 20Da, Rebel T3i, Rebel T2i, Rebel T3, Rebel T1i, Rebel XSi, Rebel XS, Digital Rebel XTi and Digital Rebel XT only (some earlier models require firmware upgrade).*

Macro Lites

Macro Twin Lite MT-24EX

- Attaches to all Canon EF macro lenses (EF 180mm f/3.5L requires Macro Lite Adapter 72C).
- Twin flash heads can be rotated over 80° angle around lens in 5 degree increments.
- Heads can be swiveled or bounced and can be removed from mounting ring for added control.
- Powerful Guide Number of 78 (feet, at ISO 100), full E-TTL control and E-TTL features including FEL, Hi-speed sync and FEB.

Macro Ring Lite MR-14EX

- Twin-tube ring lite designed for close-up photography with EF Macro lenses; Flash tubes can fire together or independently.
- Compatible with all EOS bodies.
- Supports E-TTL/E-TTL II Wireless Autoflash in conjunction with one or more compatible EX Speedlites.
- Incandescent focusing lamps and two forms of modeling flash permit preview of lighting effects.

Speedlite Transmitter

Speedlite Transmitter ST-E2

- Dedicated transmitter to control unlimited number of slave flashes.
- For Speedlites 580EX II, 430EX II, 320EX and 270EX II (also 580EX, 430EX and 420EX).
- Controls slave units up to 33 ft. outdoors and 49.5 ft. indoors.

EX-series Speedlite Lineup

	Speedlite 580EX II	Speedlite 430EX II	Speedlite 320EX	Speedlite 270EX II	Speedlite 220EX†	Macro Twin Lite MT-24EX	Macro Ring Lite MR-14EX
Dimensions (W x H x D)	3.0 x 5.4 x 4.6 in. 76 x 137 x 117mm	2.8 x 4.8 x 4.0 in. 72 x 122 x 101mm	2.8 x 4.5 x 3.1 in. 70 x 115 x 78.4 mm	2.6 x 2.6 x 3.0 in. 65.8 x 65.2 x 77 mm	2.7 x 3.62 x 2.42 in. 65 x 92 x 61.3mm	Control Unit: 2.9 x 4.9 x 3.8 in. 74 x 125.9 x 97.4mm Flash Unit: 9.3 x 3.5 x 1.9 in. 235 x 90.4 x 49mm	Control Unit: 2.9 x 4.9 x 3.8 in. 74 x 125.9 x 97.4mm Flash Unit: 4.44 x 4.96 x 1.02 in. 112.8 x 126 x 25.6mm
Weight (without batteries)	13.2 oz./375g	11.3 oz./330g	9.7 oz./275g	5.5 oz./155g	5.6 oz./160g	20.64 oz./585g (combined flash & control units)	15.1 oz./428g (combined flash & control units)
Compatibility	All EOS SLR cameras	All EOS SLR cameras	Type-A EOS Cameras	Type-A EOS cameras	All EOS SLR cameras	All EOS SLR cameras	All EOS SLR cameras
Max. Guide Number (ISO 100)	190 ft./58m	141 ft./43m	105 ft./32m	89 ft./27m	72.2 ft./22m	79 ft./24m	45.9 ft./14m
Power Source	AA (Alkaline, re-chargeable NiCd, Lithium-ion, Ni-MH) batteries (x4); Compact Battery Pack CP-E4; Transistor Pack E	AA (Alkaline, re-chargeable NiCd, Lithium-ion, Ni-MH) batteries (x4)	Four AA-size batteries - alkaline, lithium, or rechargeable Ni-MH usable	Two AA-size/LR6 Alkaline Batteries	AA (Alkaline, re-chargeable NiCd, Lithium-ion, Ni-MH) batteries (x4)	AA (Alkaline, re-chargeable NiCd, Lithium-ion, Ni-MH) batteries (x4); Compact Battery Pack CP-E3; Transistor Pack E	AA (Alkaline, re-chargeable NiCd, Lithium-ion, Ni-MH) batteries (x4); Compact Battery Pack CP-E3; Transistor Pack E

Speedlite to the Max

Whether adding a battery pack, connecting two or more Speedlite flashes, or creating a complex wireless lighting solution, Canon has flash accessories for almost any photographic situation that are perfect complements to your Speedlite.

EF 85mm f/1.2L USM •f/2 •1/30

Compact Battery Pack CP-E4
This dedicated external power pack is dust/water-resistant and makes the flash system dust/water-resistant. The power pack's performance is the same as the Compact Battery Pack CP-E3.

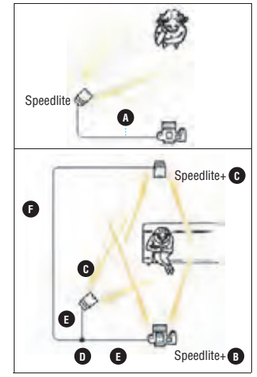
Transistor Pack E†
A high-performance battery pack with interchangeable power supplies. Available as Transistor Pack E (six alkaline batteries in Battery Magazine TP) or transistor Pack E Ni-Cd Set (Ni-Cd Pack TP and charger). Both versions include Connecting Cord ET.

Ni-Cd Pack TP
Additional rechargeable Ni-Cd Pack TP batteries are available separately. They can also be freely interchanged with Battery Magazine TP. The charger TP recharges a Ni-Cd Pack TP in approximately 15 hours.

Battery Magazine TP
This magazine holds six commonly available C-size alkaline batteries. Included with Transistor Pack E, it is available separately for instant battery changes during shooting. Can be used in place of the Ni-Cd Pack TP. Connecting Cord ET is also available separately.

Other Speedlite Accessories

	A	B	C	D	E	F
	Off-Camera Shoe Cord OC-E3	**TTL Hot Shoe Adapter 3***	**Off-Camera Shoe Adapter OA-2***	**TTL Distributor***	**Connecting Cord 60***	**Connecting Cord 300***
Camera Compatibility	All EOS SLR cameras (Except 630 & RT)	All 35mm and APS SLR cameras (Not compatible with digital SLR cameras or PowerShot digital cameras)				
Description	Dust- and water-resistant 2 ft. (0.6m) TTL cord; retains all on-camera flash functions. Same quick connect as 580EX II.	Placed in the EOS camera's accessory shoe, this adapter controls up to 4 off-camera Speedlites.	For off-camera applications of Speedlite flash units, this adapter will accept one Speedlite and a connecting cord to the camera.	This connector accepts up to 4 connecting cords.	This 2 ft./60cm coiled cord has connections on both ends for TTL Distributor, OA-2, and/or Hot Shoe Adapter 3.	This 9.8 ft./3m straight cord has connections on both ends for TTL Distributor, OA-2, and/or Hot Shoe Adapter 3.



** These accessories provide TTL or manual flash control, but are not compatible with E-TTL or E-TTL II; no automatic flash with EOS digital SLR cameras.*

Recycling Times and Shooting Capacities (580EX II, 430EX II, MR-14EX and MT-24EX)

	With the 580EX II		With the 430EX II		MR-14EX		MT-24EX	
	Recycling Time (sec.)	Shooting Capacity (No. of Flashes)	Recycling Time (sec.)	Shooting Capacity (No. of Flashes)	Recycling Time (sec.)	Shooting Capacity (No. of Flashes)	Recycling Time (sec.)	Shooting Capacity (No. of Flashes)
Compact Battery Pack CP-E4 (w / Alkaline Batteries)	0.1~2.0	350~2,450	0.1~3.0	200~1,400	0.1~3	450~2,800	0.1~3	450~2,800
Compact Battery Pack CP-E4 (w / Ni-MH Batteries)	0.1~1.5	400~2,800	N/A	N/A	0.1~5	150~1,000	0.1~5	150~1,000
Transistor Pack E† (w / Alkaline Batteries)	0.1~5	350~2,200	N/A	N/A	0.1~4	400~2,500	0.1~4	400~2,500
Transistor Pack E† Ni-Cd Set	0.1~3	300~1,800	N/A	N/A	0.1~3	330~2,000	0.1~3	330~2,000

† Discontinued product, for reference only. †† With alkaline batteries only.

Compatibility Chart

	Compact Battery Pack CP-E4	Compact Battery Pack CP-E3†	Transistor Pack E†
Speedlite 580EX II	●	●	●
Speedlite 430EX II	●††	—	—
Speedlite 320EX	—	—	—
Speedlite 270EX II	—	—	—
Speedlite 220EX†	—	—	—
Macro Twin Lite MT-24EX	●	●	●
Macro Ring Lite MR-14EX	●	●	●
Weight	5.5 oz./155g	5.5 oz./155g	29.8 oz./530g (without batteries)

Battery

Designed to help you get the most out of your EOS DSLR, Canon has designed a number of different accessories, including power supplies and grips to help extend battery life. Other specialized accessories include the Data Verification kit, CompactFlash (CF) cards, cases and much more.

EOS 5D Mark II with Battery Grip BG-E6

Battery Grips

	Battery Grip BG-E9†	Battery Grip BG-E8†	Battery Grip BG-E7†	Battery Grip BG-E6†	Battery Grip BG-E5†	Battery Grip BG-E2N†
Weight	10.4 oz./295g (without batteries)	8.1 oz./230g (without batteries)	12.0 oz./340g (without batteries)	11.1 oz./315g (without batteries)	8.1 oz./230g (without batteries)	11.5 oz./325g (without batteries)
Compatibility	EOS 60D	EOS Rebel T3i, T2i	EOS 7D	EOS 5D Mark II	EOS Rebel T1i, XSi, XS	EOS 50D, 40D
Functions	AE/FE Lock/ Index/ Reduce button, Main Dial, AF point selection/ Magnify button, Aperture/exposure compensation button, Attach/ Detach button, Vertical-grip operation switch	AE/FE Lock/ Index/ Reduce button, Main Dial, AF point selection/ Magnify button, Aperture/exposure compensation button, Attach/ Detach button, Vertical-grip operation switch	Shutter-Release button, AE/FE Lock/ Index/Reduce button, Main Dial, AF-frame-select button, Aperture/ Exposure compensation button	Shutter-Release button, AE/FE Lock/ Index/Reduce button, Main Dial, AF-frame-select button, Aperture/ Exposure compensation button	Shutter-Release button, AE/FE Lock/ Index/Reduce button, Main Dial, AF-frame-select button, Aperture/ Exposure compensation button	Shutter-Release button, AE/FE Lock button, Main Dial, AF frame-select button
Power Source	LP-E6 (x2); AA-size battery (x6), AC Adapter ACK-E6	LP-E8 (x2); AA-size battery (x6), AC Adapter ACK-E8	LP-E6 (x2); AA-size battery (x6); or AC Adapter ACK-E6	LP-E6 (x2); AA-size battery (x6); or AC Adapter ACK-E6	LP-E5 (x2); AA-size battery (x6); or AC Adapter ACK-E5	BP-511A/511/512/ 514 (x1 or x2), AA-size batteries (x6), or AC Adapter Kit ACK-E2, or Compact Power Adapter CA-PS400 plus DC-Coupler DR-400

† Accepts optional Hand Strap E1.

Power Drive Booster / Battery Pack Chart

	Power Drive Booster PB-E2	**Battery Pack BP-E1***
Weight (without batteries)	17.1 oz./484g	9.8 oz./280g
Compatibility	EOS-1v HS, 1v, 1N, 1, 3	EOS-1v HS, 1v, 1N, 1, 3
Functions	Shutter Release button, AE Lock button, FE Lock/Multi-spot Metering button, Main Dial, focusing point selector	—
Power Source	Ni-MH Battery Pack NP-E2 or Battery Magazine BM-E2 and 8 AA-size Alkaline, Lithium-ion, Ni-MH or Ni-Cd batteries	2CR5 lithium-ion battery (x1), AA-size (Alkaline, rechargeable Ni-Cd, Ni-MH) batteries (x4)

**Not compatible with AA-size lithium-ion batteries.*

Power Drive Booster PB-E2 Accessories

	Battery Magazine BM-E2	**Ni-MH Pack NP-E2**	**Ni-MH NC-E2**
Weight	1.8 oz./50g (without batteries)	10.9 oz./320g	12.5 oz./354g
Description	Magazine holds eight AA-size alkaline, lithium-ion, Ni-Cd or Ni-MH batteries. (Provided with the PB-E2)	Powerful rechargeable battery pack dedicated to the PB-E2. The rated voltage is 12V. It can be recharged over 500 times. When fully charged, it has enough power for 70 rolls of 36-exposure film at 68°F/20°C.	Charger dedicated to the NP-E3 Battery Pack and the NP-E2 Pack. Two packs can be attached at one time. The discharge feature (taking up to 8.5 hrs) cancels the pack's memory effect. It runs on 100-240V AC, ideal for international travel.

Batteries, Chargers and Adapters

	Battery Pack LP-E10	Battery Pack LP-E8	Battery Pack LP-E6	Battery Pack LP-E5	Battery Pack LP-E4N	Battery Pack LP-E4	Battery Pack NP-E3	Battery Pack BP-511A/ BP-512/ BP-514	Battery Charger LC-E10
Weight	1.6 oz./45g	1.8 oz. / 52g	2.8 oz./80g	1.8 oz./50g	TBA	6.3 oz./180g	11.8 oz./325g	2.5 oz./70g	3.0 oz./85g (without cord)
Compatibility	EOS Rebel T3	EOS Rebel T3i, T2i	EOS 5D Mark II, 7D, 60D	EOS Rebel T1i, XSi, XS	EOS-1D X, 1D Mark IV, 1Ds Mark III, 1D Mark III,	EOS-1D X, 1D Mark IV, 1Ds Mark III, 1D Mark III,	EOS-1Ds Mark II, 1Ds, 1D Mark II N, 1D Mark II, 1D	EOS 5D, 50D, 40D, 30D, 20D,20Da,10D, D60, D30, Digital Rebel	EOS Rebel T3
Description	Lithium-ion battery with a rated voltage of 7.4V and a rated capacity of 860mAh, for use exclusively with the EOS Rebel T3. Uses the LC-E10 or LC-E10E charger.	It is a large-capacity lithium-ion battery (7.2 V/1120 mAh) that provides slightly more capacity than the LP-E5. Uses the LC-E8 charger.	Lithium-ion battery pack for the EOS 5D Mark II, 7D and 60D. At 1800 mAh, it has 1.3x the capacity of the EOS 5D's battery.	Lithium-ion battery pack, exclusively for the EOS Rebel T1i, XSi and XS. At 1080 mAh, it has 1.5x the capacity of the EOS Rebel Digital XTi's battery.	Designed to be used with the EOS-1D X, the LP-E4N is a high-capacity (2450 mAH) lithium-ion battery pack – offering approximately 10% larger capacity than the LP-E4. Exact battery info can be viewed on the camera's menu.	High-capacity (2300mAh) lithium-ion battery pack is 40% less volume and 46% lighter than the NP-E3. Exact Battery Info can be viewed on camera's menu.	Ni-MH battery with a rated voltage of 12V, a rated capacity of 1,650 mAh. Water and dust resistance. Uses the NC-E2 charger (recharges in about 120 minutes).	High-capacity lithium-ion battery. BP-511A has a different contour and 26% more storage capacity than BP-512. Note: EOS D30, D60 and Battery Grip BG-ED3 cannot use BP-512.	Dedicated charger for LP-E10 battery pack is microprocessor-controlled and has built-in foldaway AC plug. Universal 100–240V AC input. Charging time is approximately 2 hours.

	Battery Charger LC-E6	Battery Charger LP-E8	Battery Charger LC-E5	Battery Charger LC-E4N	Battery Charger LC-E4	Battery Charger CG-580	Battery Charger CB-5L	DC Coupler DR-400	AC Adapter Kit ACK-E10
Weight	4.6 oz./130g (without cord)	2.9 oz./82g	2.8 oz./80g	TBA	15.2 oz./431g	5.6 oz./160g	3.5 oz./110g (including cord)	3.9 oz./123g (including cord)	0.6 oz./17.5g (DC Coupler) 6.5 oz./185g (AC Adapter)
Compatibility	EOS 5D Mark II, 7D, 60D	EOS Rebel T3i, T2i	EOS Rebel T1i, XSi, XS	EOS-1D X, 1D Mark IV, 1Ds Mark III, 1D Mark III,	EOS-1D X, 1D Mark IV, 1Ds Mark III, 1D Mark III,	EOS 5D, 50D, 40D, 30D, 20D, 20Da, 10D, D60, D30, Digital Rebel	EOS 5D, 50D, 40D, 30D, 20D, 20Da,10D, D60, D30, Digital Rebel	EOS 5D, 50D, 40D, 30D, 20D, 20Da, 10D, D60, D30, Digital Rebel	EOS Rebel T3
Description	It charges an LP-E6 battery in 2.5 hours, and can be plugged-in nearly anywhere in the world (100 –240V).	Plug-in type battery charger with charge control system (by microcomputer). Charging time is approximately 2 hours.	Charger that's included with EOS Rebel T1i, EOS Rebel XSi and EOS Rebel XS. It charges an LP-E5 battery in 2 hours, and can be plugged-in nearly anywhere in the world (100 –240V).	Two battery packs can be attached. It takes about 130 minutes to charge one LP-E4N battery pack (120 minutes for LP-E4). It plugs directly into AC outlets, and with the optional CB-570 cable, into a car cigarette lighter.	Two battery packs can be attached. It takes about 120 min. to recharge one battery pack. It plugs directly into AC outlets, and with optional CB-570 cable, into a car cigarette lighter.	Compact and light battery charger for BP-511A/ BP-511/ BP-512/ BP-514 as well as BP-522 and BP-533 for video camcorders.	Compact and light battery charger for BP-511A/ BP-511/ BP-512/ BP-514 as well as BP-522 and BP-533 for video camcorders.	Allows the camera to draw power directly from an AC power source when connected to the CA-PS400 Power Adapter or AC Adapter ACK-E2.	Enables the EOS Rebel T3 to be operated from an AC power source. Kit consists of universal 100–240V AC adapter (with power cord) and DR-E10 DC coupler.

	AC Adapter Kit ACK-E8	AC Adapter Kit ACK-E6	AC Adapter Kit ACK-E5	AC Adapter Kit ACK-E4	AC Adapter Kit ACK-E2	Compact Power Adapter CA-PS400	DC Coupler Kit DCK-E1	Car Battery Charger CBC-E6	Car Battery Charger CBC-E5
Weight	0.7 oz./20g	3.9 oz./110g (DC Coupler) 6.2 oz./175g (AC Adapter)	15.0 oz./425g	14.1 oz./399g	3.9 oz./123g (AC-E2 unit only)	10.1 oz./287g (excluding AC cord)	5.3 oz./150g (DC Coupler) 7.2 oz./205g (AC Adapter)	3.7 oz./105g	4.9 oz./140g
Compatibility	EOS Rebel T3i, T2i, BG-E8	EOS 5D Mark II, 7D, 60D	EOS Rebel T1i, XSi, XS	1D Mark IV, 1Ds Mark III, 1D Mark III,	EOS 5D, 50D, 40D, 30D, 20D, 20Da, 10D, D60, D30, Digital Rebel	EOS 5D, 50D, 40D, 30D, 20D, 20Da, 10D, D60, D30, Digital Rebel	EOS-1Ds Mark II, 1Ds, 1D Mark II N, 1D Mark II, 1D	EOS 5D Mark II, 7D, EOS 60D	EOS Rebel T1i, Rebel XSi, Rebel XS
Description	Comes with AC Adapter, DC Coupler and Power Cord. Assuring constant power throughout a shoot, it's perfect companion to the EOS Rebel T3i, EOS Rebel T2i and BG-E8.	Allows the camera to connect the DC cord to the AC adapter terminal. Kit includes the AC adapter, power cord, and DC coupler. It prevents accidental disconnection.	AC adapter Kit is a perfect companion for the EOS Rebel XSi. With constant power, there's no fear of running out of power in the middle of a shoot.	Allows the camera to connect the DC cord to the AC adapter terminal. Kit includes the AC adapter, power cord, and DC coupler. It prevents accidental disconnection.	Allows the camera to draw power directly from an AC power source. Kit includes an AC Adapter and DC Coupler DR-400.	It charges two BP-511A/BP-511/ BP-512/BP-514 battery packs. When connected to the DR-400, it allows the camera to draw power directly from an AC power source.	Allows the camera to draw power directly from an AC power source. Kit includes a dedicated DC Coupler and AC Adapter PA-V16.	A car battery charger, dedicated to the EOS 5D Mark II and its LP-E6 battery pack plugged into a car's cigarette lighter, it charges a battery pack in about 2.5 hours.	A car battery charger, dedicated to the EOS Rebel XSi and its LP-E5 battery pack plugged into a car's cigarette lighter, it charges a battery pack in about 2 hours.

Wireless

Canon's Wireless File Transmitters help enable fast, wireless image transfer from EOS DSLR cameras directly to a computer. This amazing productivity tool eliminates the need to stop and upload image files to the computer, allowing photographers to concentrate on shooting photographs.

EOS 7D with Wireless File Transmitter WFT-E5A

Wireless File Transmitter

	NEW Wireless File Transmitter WFT-E6A**	Wireless File Transmitter WFT-E5A	Wireless File Transmitter WFT-E2 II A	Wireless File Transmitter WFT-E4 II A	Wireless File Transmitter WFT-E4A	Wireless File Transmitter WFT-E3A	Wireless File Transmitter WFT-E2A
Compatibility	EOS-1D X	EOS 7D	EOS-1D Mark IV, 1Ds Mark III, 1D Mark III	EOS 5D Mark II	EOS 5D Mark II	EOS 50D, 40D	EOS-1D Mark IV, 1Ds Mark III, 1D Mark III
Description	Canon's Wireless File Transmitter WFT-E6A is designed for the EOS-1D X. It transfers images from cameras directly to a computer via wireless local area networks (LAN), and offers a number of enhanced features to improve efficiency for studios and media professionals including: wireless support for IEEE 802.11 a/b/g and the latest standard 802.11n, which deliver blazing communication speed, camera clock synchronization, linked shooting function, Bluetooth support, and auto re-send of images that were not sent during a sending error.	This wireless transmitter is dedicated to the EOS 7D. The transmitter is compatible with Wi-Fi Protected Setup to connect easily to a wireless LAN access point and automatically leads to the security setting for secure image transfer. Images can be stored in selected folders and the entire folder can be transferred. Added features include IEEE802.11a/b/g compatibility, WPS compatibility, WFT server EOS 7D, camera linking function and Bluetooth function. It allows wireless transmission (802.11a, b or g) to Mac or Windows computers up to 492 ft.	Canon's Wireless File Transmitter WFT-E2 II A is designed for the EOS-1D Mark IV, (EOS-1Ds Mark III and EOS-1D Mark III with firmware upgrade). It allows photographers to transmit images from cameras to a computer via wired or wireless local area networks (LAN) and incorporates a number of significant features into a robust, camera powered system to make wireless transfer up to 492 ft. Added functions include IEEE802.11a/b/g compatibility, WPS compatibility, camera linking function, Bluetooth function, media server function and WFT server Remote Live View.	This wireless transmitter is dedicated to the EOS-5D Mark II with firmware upgrade. The transmitter is compatible with Wi-Fi Protected Setup to connect to a wireless LAN access point and automatically leads to the security setting for secure image transfer. Images can be stored in selected folders and the entire folder can be transferred. Added functions include IEEE802.11a/b/g compatibility, WPS compatibility, camera linking function, Bluetooth function, media server function and WFT server Remote Live View. It allows wireless transmission (802.11a, b or g) to Mac or Windows computers up to 492 ft.	This wireless transmitter dedicated to the EOS 5D Mark II. The transmitter is compatible with Wi-Fi Protected Setup to connect easily to a wireless LAN access point and it automatically leads to the security setting for secure image transfer. Sending a batch of photos wirelessly is easy with the WFT-E4A. Images can be stored in selected folders and the entire folder can be transferred at once. It retains the same features as the WFT-E3A including great handling for vertical shooting and wireless transmission (802.11b or g) to Mac or Windows computers up to 492 ft. (150m)* away.	This wireless transmitter dedicated to the EOS 50D and 40D camera. Completely integrated design for outstanding handling; includes vertical controls. Wireless transmission (802.11b or g) to Mac or Windows computers. Three separate wireless methods, including wireless remote control of camera from computer. Transmits up to 492 ft. (150m)*, depending on environment and computer set-up; wired Ethernet connection up to 1,000 ft. (330m). Its USB port allows an external hard drive to be directly connected to the camera.	Canon's Wireless File Transmitter WFT-E2A allows photographers transmit images from cameras directly to a computer over a wired or wireless local area network (LAN), incorporates a number of significant features into a robust, camera-powered system to make wireless transfer up to 492 ft. (150m)* faster, simpler and less cumbersome than WFT-E1A. The WFT-E2A is smaller and attaches to the side of the camera.

GPS Accessories

	NEW GPS Receiver GP-E1**
Compatibility	EOS-1D X
Description	To be used with the EOS-1D X, the GP-E1 is Canon's first GPS Receiver. Its compact, lightweight design smoothly integrates with the camera's extension system terminal, allowing the hot shoe to remain accessible without the need for additional power. The GP-E1 automatically adds location information as EXIF data while shooting (latitude, longitude, altitude, direction, universal coordinated time (UTC)). An on-board electronic compass supports shooting even when held vertically, and the orientation can be displayed on a map with bundled software. The EOS-1D X's clock can be easily set by the GP-E1's atomic clock.

** With no obstructions between the transmitting and receiving antennas, and no radio interference. With a large, high-performance antenna attached to the wireless LAN access point.*
*** This device has not been authorized as required by the rules of the Federal Communications Commission. This device is not, and may not be offered for sale or lease, or sold or leased, until authorization is obtained.*

Remote Control & Accessories

Canon accessories are the perfect choice to help enhance your EOS System's performance. Whether through recording data or controlling your camera remotely, Canon's own accessories are designed to complement your EOS camera.

EF 100mm f/2.8 Macro •f/4 •1/125 sec.

Remote Controllers and Switches

	Wireless Controller LC-5	Remote Switch RS-80N3	Timer Remote Controller TC-80N3	Remote Switch 60T3	Remote Switch RS-60E3	Wireless Remote Controller RC-1	Wireless Remote Controller RC-6	Wireless Remote Controller RC-5
Compatibility	All EOS DSLR cameras except EOS 60D and Digital Rebel series, 1v Hs, 1v, 3	All EOS DSLR cameras except EOS 60D and Digital Rebel series, 1v Hs, 1v, 3	All EOS DSLR cameras except EOS 60D and Digital Rebel series, 1v Hs, 1v, 3	N3-compatible cameras**, with adapter 1n RS, 1n, 1, A2/A2e, RT,* 630*, 620*, 650*	EOS 60D, Rebel T3i, T3, T1i, XSi, Digital Rebel XTi/XT, Digital Rebel, ELAN 7 series, ELAN II/IIe, Rebel T2, Ti, 2000, G, X, XS, XSN, IX	EOS 5D Mark II, 7D, 60D, Rebel T1i, XSi, Digital Rebel XTi/XT, Digital Rebel, ELAN 7 series, II/IIe, ELAN, Rebel T2 Date, Ti Date, K2 Date, 10S	EOS 5D Mark II, 7D, 60D, Rebel T3i, T2i, T1i, XSi, Digital Rebel XTi/XT, Digital Rebel, ELAN 7 series, II/IIe, ELAN Rebel T2 Date, Ti Date, K2 Date, IX, 10S	EOS 5D Mark II, 7D, 60D, Rebel T1i, Rebel XSi, Digital Rebel XTi/XT, Digital Rebel, ELAN 7 series, II/IIe, ELAN, Rebel T2 Date, Ti Date, K2 Date, IX, 10S
Description	• An extended-range Wireless Controller system designed for EOS cameras with N3 remote control sockets. • Provides remote shutter release capability. • Max. transmitter to receiver distance of 300 ft./91.5m	• Remote switch to prevent camera shake for super-telephoto or macro shots and bulb exposures. • Works like a Shutter button, enabling halfway or complete pressing. • Shutter release lock. • Connects to N3-type socket. • Cord length: 2.6 ft./80cm.	• Remote switch with self-timer, interval timer, long-exposure timer, and exposure-count setting feature. • Timer set from 1 sec. to 99 hrs., 59 min., 59 sec. • Easy operations with new dial. • Illuminated LCD panel. • N3-type connector. • Cord length: 2.6 ft./80cm.	• Electromagnetic cable release with a 3-pin terminal. • Allows independent control of light metering and shutter release. • Cord length: 2 ft./60cm.	• Compact remote switch replicating all the functions of a shutter release button. • Cord length: 2 ft./60cm.	• Miniature infrared transmitter. • Set for either instant shutter release or 2-sec. delay. • Activate mirror lock and bulb shutter functions. • Operates as far as 16.4 ft./5m.	• Compact design. • Operates approximately 16.4 ft/5 m from the camera. • Set for either instant shutter release or 2-sec. delay. • Activate mirror lock and bulb shutter functions.	• Compact design. • Operates as far as 16 ft./5m from the camera.

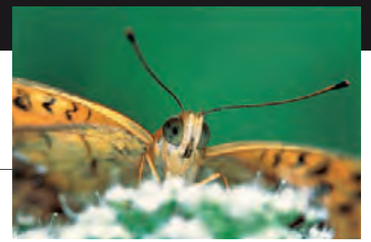
Remote Control Accessories

	Remote Switch Adapter RA-N3	Remote Switch Adapter T3	Cable Release Adapter T3	Extension Cord ET-1000N3	Extension Cord 1000T3
Compatibility	All EOS DSLR cameras except EOS 60D and Digital Rebel series, 1v Hs, 1v, 3	N3-compatible cameras**, EOS 1n RS, 1n, 1, A2/A2e, RT*, 630*, 620*, 650*	N3-compatible cameras**, EOS 1n RS, 1n, 1, A2/A2e, RT*, 630*, 620*, 650*	All EOS DSLR cameras except EOS 60D and Digital Rebel series, 1v Hs, 1v, 3	N3-compatible cameras**, EOS 1n RS, 1n, 1, A2/A2e, RT*, 630*, 620*, 650*
Description	• Enables old-model, T3 terminal-equipped accessories to be connected to cameras with the N3-type socket.	• Enables use of remote control devices with standard 2-pin sub-miniature jacks with T3-compatible EOS cameras.	• Allows conventional mechanical cable release to be used with T3-type remote control sockets.	• Connects compati-ble EOS cameras with Timer Remote Controller TC-80N3 or Remote Switch RS-80N3. • Cord length: 33 ft./10m.	• Used with any other T3-compatible accessories for extension. • Cord length: 33 ft./10m.

** EOS RT, 650, 630 and 620 require Grip GR20 with built-in T3 remote socket.*
*** T3 accessories require Remote Switch Adapter RA-N3 with N3-series cameras.*

Viewfinder Accessories

For more customization, many of Canon's EOS cameras are compatible with a vast choice of eyecups, diopter lenses and more for greater versatility in a number of shooting situations.



EF 180mm f/3.5L Macro USM •f/4.5 •1/200 sec.

Eyecups, Rubber Frames and Dioptric Adjustment Lenses

	Anti-Fog Eyepiece Ec	**Anti-Fog Eyepiece Ed**	**Dioptric Adjustment Lens E**	**Dioptric Adjustment Lens Ed**	**Dioptric Adjustment Lens Eg**	**Eyepiece Extender EP-EX15 II**	**Eyepiece Extender EP-EX15**	**Angle Finder C**	**Eyecup Ed-E**
Compatibility	EOS-1Ds Mark II, 1Ds, 1D Mark II N, 1D Mark II, 1D, D2000, 1v HS, 1v, 1N RS, 1N, 1	EOS-3, A2/A2e, ELAN 7 series, ELAN II/IIe	All EOS SLR cameras except: EOS Mark III series, EOS-3, A2/A2e, ELAN 7 series, ELAN II/IIe, IX, IX Lite	EOS-3, A2/A2e, ELAN 7 series, ELAN II/IIe	EOS-1D X, 1D Mark IV, 1Ds Mark III, 1D Mark III, 7D	EOS 5D Mark II, 60D, 50D, 40D, Rebel T3i, T2i, T3, T1i, XSi, XS	All EOS SLR cameras except: 1Ds Mark III, 1D Mark III, 5D Mark II, 60D, 50D, 40D, EOS-3, A2/A2e, ELAN 7 series, ELAN II/IIe, IX, IX Lite	All EOS SLR cameras (Includes Adapter Ec-C and Ed-C to fit any EOS camera.)	EOS-3, A2/A2e, ELAN 7 series, ELAN II/IIe
Description	These eyecups use specially treated advanced-process glass, which helps to prevent condensation, or fogging. The eyecups are useful in warm, humid and cold weather, when fogging is most likely to occur. Note: EOS-1Ds Mark III, EOS-1D Mark III and EOS 7D use Anti-fog Eyepiece Eg only.		These Dioptric Adjustment lenses provide near- and far-sighted users a clear viewfinder image without the use of eyeglasses. Available in versions from +3 to -4 dpt to match many types of eyesight, each Dioptric Adjustment Lens fits into the eyepiece holders of the appropriate EOS model for convenient use and a comfortable fit. Note: EOS-1Ds Mark III and EOS-1D Mark III require Dioptric Adjustment Lens Eg only.			Extends the eyepiece 5/8" (15mm) from the camera body and reduces viewfinder magnification by 30%. Useful for eyeglass wearers and others to keep the tip of the nose from touching the camera body.		Angle Finder C lets users adjust the viewing angle while providing a 2.5x magnification for critical focusing, or a full-screen image (1.25x) that includes exposure data. Provided with built-in dioptric adjustment for variations in eyesight.	This large eyecup keeps out most sunlight and other external light, substantially enhancing viewfinder visibility. It is especially helpful for eyeglass wearers when photographing outdoors. The mount can be rotated for vertical shots.

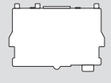
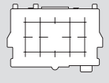
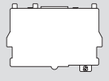
	Eyecup Eb	**Eyecup Ec-II**	**Eyecup Ed**	**Eyecup Ef**	**Eyecup Eg**	**Rubber Frame Eb***	**Rubber Frame Ec***	**Rubber Frame Ef***
Compatibility	EOS ELAN, Rebel series**, 700, 750, 850, 5D Mark II, 5D, 60D, 50D, 40D, 30D, 20D, 20Da, 10D, D60, D30	EOS-1D Mark III, 1Ds Mark II, 1Ds, 1D Mark II N,1D Mark II, 1D, D2000, 1v HS, 1v, 1N RS, 1N, 1	EOS-3, A2/A2e, ELAN 7 series, ELAN II/IIe	EOS Rebel T2i, T3, T1i, XSi/XS, Digital Rebel XTi/XT, EOS Digital Rebel, Rebel T2, Ti, K2	EOS-1D X, 1D Mark IV, 1Ds Mark III, 1D Mark III, 7D	EOS 10S, ELAN, 5D Mark II, 5D, 60D, 50D, 40D, 30D, 20D, 20Da, 10D, D60, D30, Rebel series**	EOS-1Ds Mark II, 1Ds, 1D Mark II N, 1D Mark II, 1D, D2000, 1v HS, 1v, 1N RS, 1N, 1	EOS Rebel T3i, T2i, T3, T1i, XSi, XS, Digital Rebel, Rebel T2, Ti, K2, Required for use of Dioptric Adjustment Lens E

** Used with Dioptric Adjustment Lens E. ** Except Digital Rebel, Rebel T2, Ti and Rebel K2*

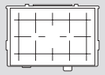
Focusing Screens Eg Series

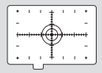
	Eg-A:	**Eg-D:**	**Eg-S:**
Compatibility	EOS 5D Mark II		
Description	Standard focus screen exclusively for the EOS 5D Mark II. Matte surface with nine AF points etched on screen. For general photography with all lenses.	Similar to standard Eg-A screen for EOS 5D Mark II, but with horizontal and vertical lines for precise subject placement or alignment. EOS 5D must be set to Custom Function IV-5-1 for accurate exposure metering.	An all-matte focus screen for the EOS 5D Mark II with finer microlens structure than the standard screens. Out-of-focus areas show more vividly than with EG-A and EG-D screens. EOS 5D Mark II must be set to Custom Function IV-5-2 for accurate exposure metering.

Focusing Screens Ef Series

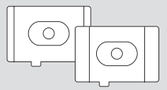
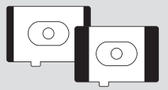
	 **Ef-A:**	 **Ef-D:**	 **Ef-S:**
Compatibility	EOS 60D, 50D, 40D	EOS 60D, 50D, 40D	EOS 60D, 50D, 40D
Description	The standard focus screen for EOS 40D. Standard Precision Matte surface, ideal with most lenses including zooms f/3.5 thru f/5.6. All matte surface. Includes a special tool to remove existing screen.	Precision Matte surface, with etched grid lines to assist composition. The EOS 40D's AF points remain fully visible. Focus characteristics suited to most lenses.	Exclusively for the EOS 40D, this focus screen is optimized for wide-aperture lenses from f/1.8 to f/2.8. Areas that are slightly out of focus appear more out of focus, making it easier to tell when focus is right-on. Ideal for users who frequently manually-focus in dim light with fast lenses.

Focusing Screens Ec Series

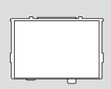
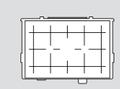
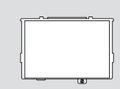
	Ec-A: Microprism	**Ec-B: New Split**	**Ec-C III: Laser-Matte**	**Ec-C IV: Laser-Matte**	 **Ec-D: Laser-Matte with Sections**
Compatibility	All models of EOS-1Ds and EOS-1D, EOS D2000, EOS-1v, 1N, 1N RS, EOS-1 and EOS-3				
Description	This matte field screen with microprism focusing spot in the center is used for general photography with all lenses.It achieves best results when using a lens of f/5.6 or faster.	This matte field screen with split-image focusing spot in the center is good for general photography with all lenses.	Standard on the EOS-1D series, EOS-1v HS/EOS-1v, and compatible with all EF lenses, this screen includes an Area AF ellipse and spot metering circle. Manual focus can be checked anywhere on the screen.	This Laser Matte Ec-C IV uses a shaping method improved over the Ec-C III. It achieves easier focusing and good background blur. brighter, less grainy, and better balanced.	This is a matte field screen with sections. Grid lines assist in determining accurate picture composition. It is especially well suited for close-up photography or for copy work using EF macro lenses, it can also be used for general photography with all lenses.

	 **Ec-H: Laser-Matte with Scale**	**Ec-I: Laser-Matte with Double Cross-Hair Reticle**	**Ec-L: Cross-Split Image**	**Ec-N: New Laser-Matte**	**Ec-R: New Laser-Matte**	**Ec-S: Super Precision Matte†**
Compatibility	All models of EOS-1Ds and EOS-1D, EOS D2000, EOS-1v, 1N, 1N RS, EOS-1 and EOS-3					
Description	A matte field screen with vertical and horizontal scales marked in millimeters, this screen is effective for close-up photography and photo-micrography. Useful in determining magnification ratios and composition, this screen can be used with all lenses.	This is a matte field screen with a clear center spot containing a double cross-hair reticule. Focusing is possible using the floating image of the central cross hair. This screen is particularly useful for photomicrography and astrophotography. Surrounding matte field can be used with all lenses.	This matte field screen has a cross-split image in the center, which divides the subject in half both vertically and horizontally for accurate manual focusing. Used for general photography with all lenses, best results are obtained when using a lens of f/5.6 or faster.	This is the standard screen for the EOS-3. The outer oval-shape the 45 AF points; the inner circle is for spot and FEL metering. When shooting, the focusing points will be indicated in red LCD markings. Along with the Ec-R screen, it is approximately 1/2 stop brighter than the Laser-Matte series screens.	This is the standard screen provided with the EOS-1N RS. It compensates for decreased viewfinder brightness due to the low reflection factor of the pellicle mirror. It is about 1/2-stop brighter but otherwise similar to Focusing Screen Ec-CII. It can be used in all EOS-1 series cameras, as well as the EOS-3.	An all-matte focus screen for the EOS-1D Mark II N with finer microlens structure than the standard screens. Out-of-focus areas show more vividly than with the other Ec type screens. Ideal for fast lenses (f/1.8 through f/2.8 max aperture).

Focusing Screen Sets for 4x5 and Square Formats

	 **Ec-1Ds/Ec-1D/Ee: Crop Lines**	 **Ec-1Ds/Ec-1D/Ee: Black Mask**
Compatibility	EOS-1D Mark IV, 1Ds/1D Mark III, 1Ds/1D Mark II, 1Ds/1D	
Description	Ideal for the portrait and wedding photographer, the set "Crop Lines" includes two focus screens—one with 4x5 (or 8x10) crop lines etched on the screen, and a second screen with lines for square composition. All exposure metering can be performed normally in camera, and red focus point illumination remains fully active. The other sets "Black Mask" have and opaque black mask outside the picture area. One screen of the set shows the area for 4x5 (or 8x10) cropping, the other shows the area for square cropping. Partial or Spot metering is recommended for these screens. E-TTL II flash exposure will definitely require significant compensation. FEL (Flash Exposure Lock) in conjunction with either partial or spot metering is recommended. 3 types are available for both sets respectively, according to the size of the CMOS sensor and viewfinder optics: for full frame 1Ds series*, 1D series and for 5D. *Can also be attached to 35mm EOS-1 series and EOS-3 cameras.	

Focusing Screens Ee Series

	 **Ee-A: Precision Matte**	 **Ee-D: Precision Matte with Grid Lines**	 **Ee-S: Super-Precision Matte**
Compatibility	EOS 5D		
Description	Replacement standard focus screen exclusively for the EOS 5D. Matte surface with nine AF points etched on screen. For general photography with all lenses.	Similar to standard Ee-A screen for EOS 5D, but with horizontal and vertical lines for precise subject placement or alignment. Overall matte surface gives viewing and focusing very similar to standard Ee-A screen. EOS 5D must be set to Custom Function 00-1 for accurate exposure metering.	An all-matte focus screen for the EOS 5D with finer microlens structure than the standard screens. Out-of-focus areas show more vividly than with Ee-A and Ee-D screens. It works best with lenses from f/1.8 to f/2.8 max aperture, especially for manual focusing. EOS 5D must be set to Custom Function 00-2 for accurate exposure metering.

Note: All focusing screens include a special tool for removing original screen and installing new screen. EOS-1Ds, EOS-1D Mark II, EOS-1D, EOS-1v HS and EOS-1v—If using New Laser Matte Focus Screens Ec-N or Ec-R, be sure to set camera's Custom Function C.Fn-0 to "0". EOS-3—If using Laser Matte Ec-A, Ec-B, Ec-C II, Ec-C III, Ec-D, Ec-I or Ec-L focus screens, be sure to set camera's Custom Function C.Fn-0 to "1". Exposure compensation is required when combining the focusing screen Ec-R with the EOS-1 or EOS-1N, and when combining the focusing screens Ec-A, B, CII, D, H, I and L with the EOS-1 N RS. Refer to each focusing screen's instructions for detailed information. † EOS-1Ds Mark III, 1D Mark III and 1D Mark II N must be set to appropriate Custom Function for accurate exposure metering when this screen is installed. Manual exposure is required for use with other EOS-1 series cameras.

Peripherals

To add more power, ergonomics and speed to your EOS SLR body, consider one of Canon's professional quality power boosters and grips. Check out the chart below to find the best match for your EOS SLR.

Interface & Video Cables

Memory Cards

	Interface Cable IFC-200U*/ IFC-500U	Interface Cable IFC-200D6/ IFC-200D4***/ IFC-200D44	Interface Cable IFC-450D6**/ IFC-450D4/ IFC-450D44	USB Interface Cable IFC-400PCU****/ IFC-200PCU	Mini-HDMI cable HTC-100	AV Cable AVC-DC400ST†	**Video Cable VC-100****	Stereo Video cable STV-250N	CompactFlash (CF) and SD Cards
Length	6.9 ft. (1.9m)/ 15.4 ft. (4.7m)	6.6 ft. (2m)	14.8 ft. (4.5m)	3.3 ft./1m	9.5 ft./2.9m	4.9 ft./1.5m	4.8 ft./1.45m	4.9 ft./1.5m	—
Compatibility	USB cable for EOS-1D X, 1Ds Mark III, 1D Mark III, 1D Mark IV, 60D, Rebel T3i, T2i, T3, T1i, XSi, XS	D6: EOS-1Ds, 1D / D4: 1Ds Mark II, 1Ds, 1D Mark II N, 1D Mark II, 1D / D44: 1Ds Mark II, 1D Mark II N, 1D Mark II IEEE 1394 (FireWire®) interface cables used to connect the EOS to a MAC or Windows.		400 cable: EOS-1Ds, 1D Mark II, 1D Mark II N, 1D Mark II, 5D, 30D, 20D, 20Da, 10D, Digital Rebel XTi, Rebel XT, Digital Rebel 200 cable: EOS-1Ds Mark II, 1D Mark II, 20D, 10D, Digital Rebel 200 cable: EOS D60, D30	EOS-1D X, 1D Mark IV, 5D Mark II, 7D, 60D, 50D, Rebel T3i, T2i, T3, T1i	EOS-1D X, 1D Mark IV, 7D, 60D Rebel T3i, T2i	All EOS DSLR cameras except original EOS-1D, 1Ds, Rebel T1i	EOS 5D Mark II,	4GB/1GB SDHC cards: All EOS DSLR cameras except EOS-1Ds, 1D, D2000, 5D Mark II, 7D, 5D, 50D, 40D, 30D, 20D/10D, D60/D30, Digital Rebel XTi/XT and Digital Rebel. 4GB CF cards: All EOS SLR cameras except: EOS 60D Digital Rebel T2i, T1i/ XSi/XS
Description		D6: 6-pin/6-pin, D4: 4-pin/4-pin Mark II series cameras have 4-pin FireWire connector.		USB interface cables used to connect the EOS to a MAC or Windows.	Cable to connect the Camera's mini-HDMI OUT terminal to the TV's HDMI port.	Enables direct image display from the EOS to an HD television or a similar display device.	Enables direct image display from the EOS to a television or a similar display device.	Cable to connect the EOS 5D Mark II's 3.5mm dia. 4-pole mini jack to the TV or other appliance's AV jack (video and audio L/R).	SimpleTech® CF, SD and SDHC cards are available through Canon.

** Comes standard with the EOS-1D X, 1Ds Mark III, 1D Mark IV, 1D Mark III, 5D Mark II, 7D, 60D, 50D, 40D, Rebel T2i, T1i, XSi, XS ** Comes standard with the EOS-1Ds*
**** Comes standard with the EOS-1D Mark II **** Comes standard with the EOS-1Ds Mark III, 1D Mark IV, 1D Mark III, 1Ds Mark II,1D Mark II N, 1D Mark II, 5D Mark II, 7D, 5D,50D, 40D, 30D, 20D, 10D and all Digital Rebel † Comes standard with the EOS 1D Mark IV, 7D, 60D, Rebel T3i, T2i*

Tripod & Monopod	**Deluxe Tripod 300** (Level Included; Quick Release Photo Platform)	**Monopod 500**
Length	62" extended/23" folded	64.5" extended/21.9" folded
Weight	2.65 lbs.	1.1 lbs.
Description	This lightweight tripod is designed for easy portability and maximum stability. It features a 3-way pan head for precise control. The 3-section tubular leg construction allows for amazing stability. The tripod also features a built-in water level and a quick release shoe.	A lightweight, high-quality monopod featuring a deluxe 4-section compact tubular leg with quickside-lever leg locks and rubber tipped foot for added stability. The Monopod 100 has a foam-covered handgrip, wrist strap and also a ball socket head.

Rain Cover

The rain cover can be used with any EOS DSLR and select EOS film cameras by replacing the eyecup. Comes in small, medium and large to fit a wide range of lenses.

Canon Straps

Professional Neck Strap 1
Rugged, high quality neck strap designed for the most demanding photographers. Features durable non-slip backing, quick-release clips and anti-twist hardware to make carrying and shooting easy.

Wide Neck Strap EW-EOS 5D Mark II	**Wide Strap EW-EOS 7D**	**Wide Strap EW-EOS 60D**	**Wide Strap EW-100DB III**	**Hand Strap E1**	**Hand Strap E2**
NEW **Wide Strap L7**	**Neck Strap L4**	**Neck Strap L3**			

**Also available separately. †For compatibility with specific lenses see your Canon Authorized Dealer or visit usa.canon.com/eos.*

Bags & Cases

Canon offers a comprehensive line of accessories for the photographer on the go. Canon's camera cases are built specially to help protect EOS models, and the bags can accommodate a number of different camera configurations. These are all built to the highest standards, and are the perfect complement to the EOS System.

Bag	**Digital Gadget Bag 100DG** (Includes Custom Media Case 10DG)	**Digital Gadget Bag 200DG**	**Professional Gadget Bag 1EG**	**Deluxe Gadget Bag 10EG**
Storage Capacity	1~2 | 2 ~ 3 | 1	1~2 | 2 ~ 3	2 | 7 ~ 10	2 | 5 ~ 8
Dimensions	Inside: 13" x 9.5" x 6.25" (W x H x D)	Inside: 10.5" x 7.5" x 7" (W x H x D)	Inside: 14.2" x 8.7" x 8.3" (W x H x D)	Inside: 10.5" x 8.0" x 7.5" (W x H x D)
Description	To hold cameras, lenses, accessories and a laptop computer. It features a durable, water-repellent nylon extender, pockets and padded dividers. Also Custom Media Case 10DG* to organize memory cards and CDs is included.	This bag has a roomy main compartment for camera body and extra lenses. Front and side pocket hold extra batteries, storage media and others. This functional bag is with non-slip shoulder strap and water-resistant nylon covering to keep your gear safe and sound.	Waterproof, urethane-coated material provides this bag with superlative weather protection and the weather flapped top cover. Fully padded pockets and zippered pouches provide storage spaces with fast access to equipment.	Made with rugged, waterproof material with all the features of the Professional Gadget Bag 1EG. Plus a built-in waist belt that tucks away behind the rear pouch.
Bag	**Gadget Bag 2400**	**Deluxe Back Pack 200EG**	**Custom Gadget Bag 100EG**	**Zoom Pack 1000**
Storage Capacity	1 | 1 ~ 2	1~2 | 3 ~ 4	1~2 | 3 ~ 4	1 | 1
Dimensions	Size: 9.5" x 7.0" x 6.0" (W x H x D)	Inside: 10" x 14.75" x 5" (W x H x D)	Inside: 9" x 7" x 5.5" (W x H x D)	Inside: 6.5" x 8.7" x 4.72" (W x H x D)
Description	A lightweight and versatile camera bag designed to hold your important gear. Durable water-repellant nylon sell and padded interior keep all equipment secure. Front and side pockets add storage space and easy access for smaller items.	Perfect for the active photographer. Constructed of rugged water-repellant nylon, well arranged dividers and multiple pockets and pouches mean there is plenty of room for just about anything.	The front zippered pouch features 3 accessory pockets. The rear flat-pouch is perfect for storing things such as plane tickets. There is also a zippered full-length mesh pouch inside the tip cover.	Specially designed to comfortably transport one camera with a standard zoom lens. It features waterproof material, a belt strap and front pouch for small items such as films, memory cards or accessories.

Case	**Semi-Hard Case EH19-L**	**Semi-Hard Case EH18-L**	**Semi-Hard Case EH17-L**	**Semi-Hard Case EH14-L**	**Semi-Hard Case EH15-L**
Compatibility†	EOS Rebel T3i, T3, T1i, XSi	EOS Digital Rebel XTi, XT	EOS 30D, 20D, EOS 20Da	EOS ELAN 7 series	EOS Rebel T2, Ti, K2

The Perfect Complement to Your EOS System

With shared EOS technologies like Genuine Canon optics, Optical Image Stabilizer, DIGIC Image Processor, and a familiar user interface, it's easy to transition seamlessly between an EOS DSLR camera and a PowerShot digital camera. They're the perfect complement to each other.

PowerShot DIGITAL CAMERA

PowerShot S100 DIGITAL CAMERA

Serious Shooting Power in a Sleek Design.

Silver

Black

The new PowerShot S100 delivers the stunning image quality advanced users desire with its enhanced HS SYSTEM—a combination of the latest **DiG!C 5** Image Processor and a 12.1 Megapixel CMOS sensor. Utilizing the increased processing power of the **DiG!C 5** Image Processor, the S100 can capture low-light images with greatly reduced blur and noise. Increased speed makes it possible to capture a series of fast-action shots at full sensor resolution with High-speed Burst HQ. Record in Full 1080p HD Video in stereo sound and capture beautiful portraits with the f/2.0 lens that has a wide focal length of 24mm. Features like the customizable control ring and option to shoot in RAW + JPEG shooting modes make the S100 a tool for creative control.

HS SYSTEM · FULL HD 1080 · DiG!C 5 · 24mm WIDE · f/2 LENS · OPTICAL IMAGE STABILIZER · INTELLIGENT IS · ISO 6400 · RAW · Manual Control · Control Ring · Smart AUTO 32 SCENES · HQ High-speed Burst HQ · GPS*

PowerShot G12 DIGITAL CAMERA

The Flagship of Brilliant Performance.

The PowerShot G12 offers the power of EOS technology in compact design. The Canon HS SYTEM – a combination of a 10.0 Megapixel sensor and **DiG!C 4** Image Processor – and fast f/2.8 5x Optical Zoom lens, delivers stunning quality in unfavorable lighting. The G12 can also preserve footage in amazing 720p HD video with stereo sound and view all recorded material on the convenient PureColor System 2.8-inch Vari-angle LCD. And to enhance the creative control even further, a Front Dial brings easy access to customizable camera parameters (aperture, exposure and white balance) at a turn, and RAW + JPEG shooting modes that make this camera an incredibly flexible and versatile tool.

HS SYSTEM · DiG!C 4 · 28mm WIDE · OPTICAL IMAGE STABILIZER · HYBRID IS · Optical Viewfinder · PureColor SYSTEM LCD · ISO 3200 · RAW · Manual Control · Smart AUTO · HD · Front Dial · Electronic Level

** In certain countries and regions, the use of GPS may be restricted. Therefore, be sure to use GPS in accordance with the laws and regulations of your country or region. Be particularly careful when traveling outside your home country. As a signal is received from GPS satellites, take sufficient measures when using in locations where the use of electronics is regulated.*

Program AE 1/20 sec., F2.8, ISO 1250

HS SYSTEM

The superb performance of the PowerShot G12 and S100 is in no small part due to the HS SYSTEM from Canon. The combination of an advanced high-sensitivity sensor and the brilliant **DiG!C** Image Processor, along with the fast lenses (f/2.8 on the G12 and f/2.0 on the S100) and the Canon Optical Image Stabilizer, ensure enhanced performance. It delivers lower noise images even at higher ISO speeds and an increase in dynamic range. With less blurring and superb detail, image quality is dramatically improved in numerous shooting situations.

HD Video

The PowerShot G12 and S100 do more than take amazing photos. They are also exceptionally versatile image capture tools that can shoot stunning 1080p Full HD video (S100) or 720p HD video (G12). Enjoy your spectacular HD footage with stereo sound on your HDTV, with the convenient HDMI output connector.

DiG!C 5 / 4 Image Processors

Since their ground-breaking introduction in 1999, Canon **DiG!C** Image Processors have set the standard for performance and brought powerful new features to PowerShot digital cameras with each successive generation. The **DiG!C 4** Image Processor ushered in a new level of picture quality and accelerated processing, making possible features such as high-speed continuous shooting, Full HD Video, and improved low-light capture. The latest **DiG!C 5** Image Processor, found in select new PowerShot models, delivers higher quality continuous rapid shooting, improved noise reduction under low light and an advanced Multi-area White Balance.

Bright Lenses

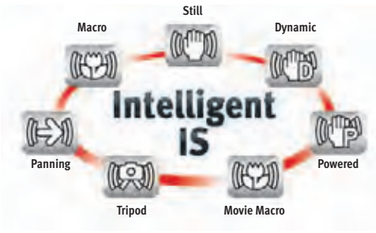
The PowerShot G12 and S100 come equipped with some of the most celebrated optics offered by Canon. With maximum apertures, fast lenses (f/2.8 on the G12 and f/2.0 on the S100), wide-angle zooms (28 – 140mm on the G12 and 24 – 120mm on the S100) and the lens-based Optical Image Stabilizer (OIS), images are guaranteed to be sharp and crisp. Now, Canon takes it even further with Hybrid IS to work in unison with OIS to greatly reduce pitch and yaw during macro photography to produce impressive results no matter the subject.

Optical Image Stabilizer

Handheld shooting can often lead to camera shake, making photos and videos blurry. Canon's Optical Image Stabilizer is a sophisticated system that shifts a lens group to correct unwanted camera movement. It makes handheld photography more practical in more shooting situations. For photos, it enables shooting at slower shutter speeds, accommodating more low-light shooting situations than ever before without having to boost ISO sensitivity. With camera shake reduced, you get a sharper, steadier image.

Intelligent IS

The latest advance in Canon Optical Image Stabilization technology, Intelligent IS analyzes camera movement and applies the best shake correction method for the shooting situation. For stills, the system automatically selects among Normal, Panning, Macro (Hybrid IS) and Tripod IS modes. When shooting video, the system automatically selects among Dynamic, Powered, Macro and Tripod IS modes. With Intelligent IS, you can concentrate on image capture, letting the camera make the most effective IS settings to prevent blur.



RAW Image Capture

Both the PowerShot G12 and S100 offer RAW image recording in addition to JPEG. Perfect for images that the photographer wishes to work with in post-production, RAW files are the equivalent of digital negatives, in that only the image data is recorded. With RAW image files, the photographer can alter aspects like color balance, sharpness, saturation and more, infinite times in post-production practically without image degradation.

Enhanced Camera Operation

Features, like the 2.8-inch Vari-angle PureColor System LCD, found on the PowerShot G12, and the control ring found on the PowerShot S100, bring a new level of customization to the photographic process. With the G12's Vari-angle PureColor System LCD, it's simple to compose and shoot with the camera in almost any position, enhancing composition choices and making shooting possible in more situations. With the G12's front dial and the S100's control ring dial, parameters like exposure, aperture, white balance, zoom and more can be accessed and set with a simple twist.

©Nick Vedros

PHOTO PRINTER TECHNOLOGY

Built upon a foundation of leading-edge technologies, the EOS System puts photographers in touch with their mind's eye, enabling them to capture images of beauty and clarity that had once existed only in their imaginations. Canon's commitment to photographic excellence, however, does not end with image capture. Combining Canon's superb expertise in photography, photocopying and printing technologies, Canon imagePROGRAF and PIXMA photo printers are redefining output quality, performance and convenience. They are the perfect complement to your EOS System with results that are nothing short of stunning!

imagePROGRAF iPF5100

PIXMA PRO-1

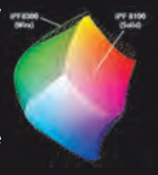
PIXMA Pro9000 Mark II

imagePROGRAF Printer Technology

Photographers seeking to produce their own gallery-grade inkjet prints have had limited choices until now. Understanding the demands of professional photographers — especially those who shoot with the EOS System — Canon has responded with the imagePROGRAF series Photo Printers. Both feature impressive new technologies that bring superb quality and performance to large format photo printing. It's never been simpler or more cost-effective to produce gallery-grade prints at home or in the studio.

Incomparable 12-Color LUCIA EX Ink Set

With increasing consumer demand for professional and high quality print output, high-end graphic and photographic studios continue to seek the capability to accurately produce vivid output of their most demanding projects. The all-new 12-Color LUCIA EX pigment ink set from Canon, incorporated into the 44-inch imagePROGRAF iPF8300, 24-inch imagePROGRAF iPF6350 and the iPF6300 printers, increases the achievable color gamut by approximately 20 percent to produce rich, expressive imagery. The introduction of the new LUCIA EX ink set provides photographers with the ability to precisely achieve their desired results by producing more expressive and crisp blacks, smooth color gradations, and the capability to faithfully reproduce the finest details in the shadowed areas of photographs. Even very delicate shading is reproduced smoothly to give images exquisite depth.



Canon RC Photogloss L=50

The new pigment inks are also designed with an innovative polymer structure that results in greater scratch resistance and protection from color fading, while also reducing bronzing and metamerism, ensuring durable, stable output. Additionally, LUCIA EX pigment inks exhibit excellent short-term color drift ("dry-down") behavior, which is critically important for color-managed workflows and in proofing applications. The new LUCIA EX inks are also resistant to damage from atmospheric ozone, a particular concern in urban environments in situations where prints might be displayed unframed and exposed to ambient indoor air.

LUCIA 12-Color Pigment Ink Set

Automatic Color Stability Control System

All imagePROGRAF printers offer a sophisticated, automatic color stability control system for simple, predictable color. With a high-performance multi-sensor installed in the printer, calibration is done easily and quickly (approximately 10 minutes) with a simple setup from the printer's operation panel. When calibrated, photographers will find amazing consistency among all calibrated printers they might use. Canon's imagePROGRAF color calibration will help ensure that the colors photographers saw when they captured their images, and on their calibrated computer screens will be preserved in print.

Photolithographic User-Replaceable Print Heads

Canon's FINE (Full-photolithography Inkjet Nozzle Engineering) print heads help ensure accurate and detailed ink delivery, no matter the medium being used for printing. This new, advanced head design uses two print heads — each with 15,360 nozzles — yielding over 30,000 nozzles, which release microscopic ink droplets quickly and precisely. This not only makes extremely high output resolution simple, but also provides for faster, more reliable printing. Photographers no longer need to compromise on print speed to attain high image quality because Canon's superb print head technologies deliver both. The large number of nozzles also substantially increases print head life, so the printer requires less frequent maintenance. The print heads are user replaceable, and can be replaced with minimal downtime and without service calls, saving time and money and increasing productivity.

Multi-nozzle Dual Print Heads

16-Bit Printing Support

While conventional inkjet printers support 8 bits per-channel and require a conversion from 16 bits somewhere during the workflow, the imagePROGRAF printers provide advanced support for high-bit depth files. Software Plug-ins enable high-bit depth images to be printed directly from Digital Photo Professional. Also included is an export

module for printing 16-bit files directly from Adobe® Photoshop®. These features provide the photographer with the first true wide-dynamic-range workflow option from capture to output. Images are reproduced with smoother tonal gradations for greater photorealism. Dynamic-range-related problems, such as posterization and banding, are significantly reduced.

Exclusive Canon L-COA Image Processor

High Performance & Integration
Integrated System & Engine Control

High Speed Engine Control
High Accuracy & High Speed Control of High Density Head

High Fine Image Process
Integrated System & Engine Control

©Eric Meola

Automated Black Ink Cartridge Switching

The ink set includes both black and matte black cartridges to allow printing on glossy photo paper and matte paper respectively without switching cartridges and needlessly wasting ink. Other printers require the user to perform an inconvenient and wasteful manual operation to flush unused ink and switch cartridges. However, with the Canon imagePROGRAF Printers, both black ink cartridges are loaded and live at all times, so switching between media types is performed efficiently with a simple push of a button.

Vast Output Media Selection

The imagePROGRAF Printers support a wide range of paper and specialty output media, such as resin coated photo paper, canvas and fine art paper.

Roll Paper

4-way media feeding (iPF5100 only), including a roll feed, enables the printer to handle media thicknesses from 0.08 to 0.8 millimeters*. Besides media available from other manufacturers, Canon offers more than 35 different types of compatible paper, with additional paper and media types in the works. Moreover, the supplied Media Configuration Tool enables the user to easily update paper configurations in the driver, using a periodically published database, to accommodate new Canon media as they become available.

** iPF6200, iPF6100 and iPF5100 handle: 0.08 to 1.5 millimeters*

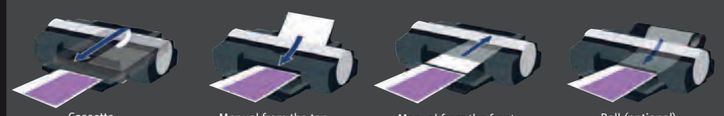
Automatic Head Clog Detection

Canon's sophisticated nozzle clog detection system automatically senses non-firing nozzles and executes a print head cleaning cycle as required. Should a clogged nozzle fail to recover after cleaning, the system automatically compensates by substituting other functioning nozzles. This minimizes print-head-related output failures, reduces paper waste and improves print head reliability, saving photographers both time and money.

Advanced Connectivity

The imagePROGRAF printers are equipped with USB 2.0 Hi-Speed and Ethernet interfaces. An IEEE 1394 Firewire interface is also an available option. The printers also feature excellent multi-platform support, helping to enable seamless integration with a wide variety of hardware and workflow configurations.

4-way Media Feed (iPF5100 only)



PIXMA Printer Technology

Canon's PIXMA photo printers bring life to images taken with EOS DSLR cameras. With the introduction of the PIXMA PRO-1, Canon has entered the realm of fine art printing while remaining true to the Canon quality and speed photographers everywhere know and trust.

12-color LUCIA Pigment-based Ink System

The PIXMA PRO-1 has an entirely new 12 color ink set consisting of six color inks: Cyan, Magenta, Yellow, Photo Cyan, Photo Magenta and red; Five monochrome inks: Photo Black, Matte Black, Dark Gray, Gray and Light Gray plus a new Chroma Optimizer. The LUCIA pigment ink system not only produces exceptionally beautiful prints, it offers incredible stability and longevity -- an estimated 200 years album life, light-fastness up to 100 years, and gas-fastness of 50 years*. Plus, with 12 individual ink tanks, users can replace a single color, reducing waste and saving money.

Chroma Optimizer

Canon's new Chroma Optimizer, found on the new PIXMA PRO-1, enhances the LUCIA pigment inks with a uniform standard of glossiness and tonal continuity on the print. A clearcoat "ink" that is applied over the printed image, Chroma Optimizer fills in surface irregularities and reduces the difference in height among ink droplets. The improved surface reflection produces a more uniform glossiness, enhanced black density and expanded color gamut. The Chroma Optimizer also reduces bronzing and delivers more balanced color.

Five Monochrome Inks

For black and white prints of uncompromising quality, The PIXMA PRO-1 uses five monochrome inks—black, Photo Black, and three different shades of gray to help ensure smooth gradations and natural tones. These include light gray ink, which helps to suppress graininess, especially in highlight areas where graininess is often most noticeable; gray, for gray balance adjustment and reduced graininess in mid tones; dark gray for smoother gradations; photo black for enhanced contrast; and matte black for enhanced density (especially on Fine Art Papers). Chroma Optimizer enhances the PIXMA PRO-1's monochrome inks by reducing surface reflection on prints, showcasing detail and richness in darker areas of the composition.

Large-volume ink tanks

For higher levels of productivity and less ink tank replacement, the PIXMA PRO-1 features new ink tanks with 2.5x the capacity of those used by the Pixma Pro 9500 Mark II. A separate, improved print head, plus sub-tank and tubular ink supply systems have been updated to work together seamlessly with incredible printing efficiency. By moving the ink tanks off of the print head the printer is able to operate much faster and more efficiently.

FINE Technology Print Head with 12,288 Nozzles

The PIXMA PRO-1's amazing FINE (Full-photolithography Inkjet Nozzle Engineering) print head delivers professional quality prints with fine detail and a high resolution of 4800x2400 dpi max. Thanks to the FINE print head's microscopic ink nozzles, 1024 per color, 12,288 nozzles in total, ink droplets can be placed with a pitch of 1/4800 inch at minimum, resulting in detailed, precise, smooth and glossy prints with exceptional longevity*.

Three Color Modes Including New Photo Color Mode

The PIXMA PRO-1 introduces three distinct color printing modes, including a new default color mode tailored to professional photographers requirements. Linear Tone mode, the printer's default mode, accurately reflects the image while adjusting for optimal gradation. ICC Profile mode prints faithfully to the photographers previously chosen image characteristics, whether Adobe RGB (1998) or the Picture Style setting as recorded in the camera. Photo Color mode, the default mode on previous printers, places emphasis on a punchy, optimized look by emphasizing blues and greens. While not as "realistic" as other print modes, Photo Color mode delivers prints often in line with perceived color as remembered by the viewer.

OIG System

The Optimum Image Generating (OIG) system improves the PIXMA PRO-1's prints by determining the optimal mix of inks and placement of ink droplets. It analyzes colors in the image and calculates the most desirable results for the chosen print mode and media, taking into account color reproduction, tonal gradations, density of blacks, graininess and glossiness of the print. Superior results are obtained due to the precise placement of ink droplets, combined with the printer's phenomenal range of inks and the Chroma Optimizer.

Support for 1200ppi Input

Few inkjet printers can take advantage of the improved resolution in today's digital cameras. The PIXMA PRO-1 can make full use of 1200 ppi image data for improved reproduction of fine lines and smoother, less jagged edges. When images are processed at 1200ppi through compatible software like Adobe Photoshop or Easy PhotoPrint Pro then printed through the PIXMA PRO-1, the difference in fine detail is nothing short of remarkable.

Color Conversion Algorithm

This determines the optimum balance of ink mixing for each print mode and media by carefully calculating the best results using various factors of the image such as color reproduction, graininess, uniform glossiness, reduced metamerism and anti-bronzing effect.

Real-time Ink Ejection Control

By controlling the volume of ink ejected at all times, the PIXMA PRO-1 stabilizes the printing color and maintains ink density regardless of temperature fluctuations.

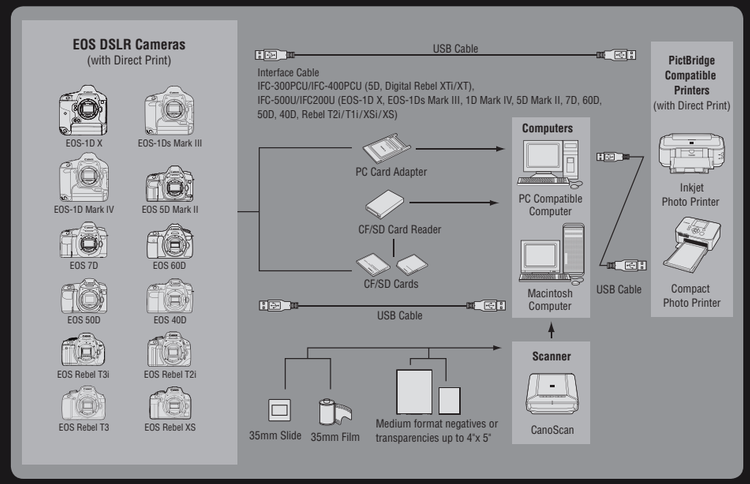
Easy-PhotoPrint Pro Software

Canon's Easy-PhotoPrint Pro (EPP Pro) software plug-in for Digital Photo Professional, Adobe® Photoshop® and Adobe® Photoshop® Elements® provide an intuitive photo printing experience. EPP Pro has layout options such as pattern prints, contact prints and prints with shooting information. It also allows for color adjustments, including ICC Profile-based color management, Linear Tone, Photo Color, monotone printing and grayscale printing, and all settings can be saved. PIXMA Pro printers also incorporate the Ambient Light Correction functionality that helps ensure consistent color regardless of the different lighting conditions in which a printed image is viewed.

PictBridge

Shoot digital, print direct. It's a fast and easy way to print pictures on the spot without a computer. Just connect any PictBridge-compatible printer to a digital camera and print.

PIXMA PRO-1



**Based on accelerated dark storage testing by Canon under controlled lighting, temperature and humidity conditions. Canon cannot guarantee the longevity of the prints; results may vary depending on printed image, display/storage conditions and environmental factors.*

Photo Printing Redefined

Canon photo printers deliver professional, lab-quality prints of images taken by EOS DSLR cameras with convenience and speed. Augmented by new ink sets and technology that improve the quality of color and black-and-white prints, Canon's new imagePROGRAF and PIXMA photo printers have redefined professional photo output.

©Eddie Tapp

imagePROGRAF iPF6350 / imagePROGRAF iPF6300

LUCIA EX 12-Color Pigment Ink Set for Professional Color Reproduction.

The Canon imagePROGRAF iPF6350/iPF6300 are a 24-inch large format printers designed for professional image-makers seeking the highest standards for quality-control and image reproduction. With 30,720 nozzles for exacting detail, a vast color spectrum is produced by the re-formulated 12-color LUCIA EX pigment ink set, creating expressive, crisp blacks, smooth color gradations and the capability to reproduce the finest details in the shadow areas of photographs. Two print output options, one for photos and one for text, give users the ability to create exquisite prints with exceptional detail.

imagePROGRAF iPF5100

©Stephen Eastwood

Superb Color Reproduction with Canon's LUCIA 12-Color Pigment Ink Set.

With Canon's imagePROGRAF iPF5100, no-compromise large-format, fine art printing is incredibly easy. Canon's exclusive LUCIA 12-color pigment ink set yields a tremendous range of colors and grays. For smooth, detailed color and black and white images, no matter the media. Canon's FINE photo-lithographic heads help to ensure accurate plotting of even the fine details thanks to over 30,000 nozzles. Matte Black ink and Black ink cartridges are both loaded in the printer at the same time, enabling automatic switching without wasting time or ink.

NEW

PIXMA PRO-1

Fine Art on the Desktop.

The new PIXMA PRO-1 delivers amazing results for archival quality fine art printing, right at your desk. Complete with an all-new 4800 x 2400 dpi FINE technology print head and 12 large individual tanks using LUCIA pigment inks, the PIXMA PRO-1 produces long-lasting lightfast* prints quickly and easily. It features 5 monochrome inks for phenomenal black and white prints, a new Chroma Optimizer to produce prints of great tonal range and surface, and can print up to 13" x 19" or 14" x 17" prints, fast.

*Based on accelerated dark storage testing by Canon under controlled lighting, temperature and humidity conditions. Canon cannot guarantee the longevity of the prints; results may vary depending on printed image, display/storage conditions and environmental factors.

©Michele Celentano

PIXMA Pro9000 Mark II

Professional Quality Photos for Big Ideas.

Capable of quickly printing lab-quality prints up to 13" x 19", Canon PIXMA Pro9000 Mark II offers the perfect combination of speed and versatility. Its FINE print head generates a maximum resolution of 4800 x 2400 dpi and ChromaLife100 dye-based inks create long lasting, beautiful photos. Canon's Easy-PhotoPrint Pro software, including plug-ins for Adobe® Photoshop®, Digital Photo Professional, and newly included Adobe® Photoshop® Elements® 6 software provides an excellent photo printing experience.

NEW

WIRELESS!

PIXMA MG8220

The Ultimate Wireless* Printing and Scanning Solution with Features that Inspire.

Exceptional quality, versatility and ease-of-use, combined with high-speed, is what makes the PIXMA MG8220 the ultimate Wireless Photo All-In-One. The beautiful Intelligent Touch System allows you to effortlessly operate your machine with gorgeous touch-sensitive controls, and the built-in film scanning unit allows you to scan in slides and film with ease. Also enjoy built-in wireless capabilities that let you print and scan wirelessly from almost anywhere around the house and more.

PIXMA iP100

High Quality and Portable.

Up to 9600 x 2400 color dpi with microscopic droplets as small as 1 picoliter, print a 4" x 6" photo in approximately 50 seconds, and your photo can be enhanced with Auto Image Fix. The PIXMA iP100 Mobile Printer is also capable of printing wirelessly via IrDA or optional Bluetooth.

*Wireless printing requires a working Ethernet network with wireless 802.11b/g or n capability. Wireless performance may vary based on terrain and distance between the printer and wireless network clients.

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REALiS PROJECTOR BENEFITS

Canon created the REALiS line of multimedia projectors to meet the high demands of imaging professionals. REALiS projectors feature Canon's patented Aspectual Illumination System (AISYS) and LCOS (Liquid Crystal on Silicon) technology. Incorporating sophisticated Canon optics and a high-accuracy color management system, REALiS projectors display even the subtlest hues and gradations, reproducing still and moving images with amazing color and clarity. For razor-sharp, brilliant images and the confidence of Canon-to-Canon, there's no substitute for REALiS projectors.

Display Stunning High Resolution Images and Video

Thanks to their native high resolutions, REALiS Projectors have the ability to display wide screen content. The REALiS WUX10 Mark II and REALiS WUX4000 both offer native WUXGA (1920x1200) resolution, perfect for displaying high resolution photographs and high-definition 1080p video – with zero compression.

The LCOS Advantage

The advantages of Canon LCOS (Liquid Crystal on Silicon) technology are easy to see: lattice-free, seamless images with exceptional color, intricate detail, crisp text and HD images that leap off the screen. New optical elements incorporated into the LCOS system enhance the uniformity of light, raising the bar in image presentation. Photos and videos are rich with color, high contrast and sharp resolution.

The AISYS Optical Engine

The driving force behind Canon's LCOS technology is our proprietary AISYS Optical Engine. AISYS, which stands for "Aspectual Illumination System," efficiently utilizes and equalizes light from the projector lamp, boosting the projectors' brightness and contrast while maintaining a lightweight and compact size.

AISYS
Aspectual Illumination System

Accurate Color Reproduction

All REALiS Projectors feature Canon's high-accuracy Color Management System (CMS). The Canon CMS ensures accurate color reproduction over an extended color space and compensates for color variances due to lighting differences. The advantage: true HD-quality color and gradation even in the toughest conditions.

6-Axis Color Adjustments

REALiS Projectors also offer a 6-Axis Color Adjustment function which allows both hue and saturation adjustments independent of RGB and CMYK color axes. This feature is ideal for professionals with very demanding color requirements.

Flexible Image Modes

REALiS projectors offer flexibility by allowing users to select the image mode that best suits the characteristics of their content. For example the "Adobe RGB" or "sRGB" modes are ideal when color fidelity is essential.

Convenient. Connectable. Compatible.

Canon's line of REALiS Multimedia Projectors offer convenient interfaces with multiple inputs/outputs, enabling the connection of a variety of devices, including laptop/desktop computers, digital cameras and camcorders.

Digital Photo and Video Projection

High-resolution Canon REALiS projectors use LCOS technology to display all the detail and texture captured by your digital camera – projecting sharp, seamless images with film-like quality. Equipped with advanced color management settings, REALiS projectors have everything needed to display photos and videos with exceptional color and accuracy in a compact unit.

REALiS WUX4000

MULTIMEDIA PROJECTOR

High Resolution and Exceptional Detail for Large Venues

The REALiS WUX4000 is a high-performance WUXGA (1920 x 1200) resolution installation projector featuring Canon AISYS-enhanced LCOS technology and interchangeable Genuine Canon lenses to deliver spectacularly clear and rich images. Providing 4000 lumens brightness, streamlined installation and maintenance, and powered vertical/horizontal lens shift, the REALiS WUX4000 is an ideal large-venue projector. A full set of input and output terminals assure flexible connectivity.

REALiS WUX10 Mark II

MULTIMEDIA PROJECTOR

High Definition and Optical Excellence

With cutting-edge WUXGA high-definition resolution (1920 x 1200), the wide-screen REALiS WUX10 Mark II adds impact to any presentation. Canon's proprietary AISYS-enhanced LCOS technology, a high-performance 1.5x optical zoom lens and full 10-bit processing ensure outstanding color reproduction and razor-sharp projected images. It offers versatile connectivity, including an HDMI port (version 1.3 deep color), a DVI-I input and a built-in RJ-45 network connection for remote management.

REALiS SX7 Mark II

MULTIMEDIA PROJECTOR

High Brightness and Astounding Color Reproduction

The Canon REALiS SX7 Mark II projects true-to-life, razor-sharp images with exceptional color reproduction. This powerful projector features a bright 4000 lumens, SXGA+ (1400 x 1050) high resolution, and an Adobe RGB Color Match System, making it ideal for photo studios and art museums/galleries. Brilliant color and contrast plus outstanding image detail are assured by the projector's superb 1.7x optical zoom lens and Canon AISYS-enhanced LCOS technology.

REALiS SX80 Mark II

MULTIMEDIA PROJECTOR

Amazing Versatility and Performance

Delivering 3000 lumens brightness, the Canon REALiS SX80 Mark II features SXGA+ (1400 x 1050) resolution, Canon AISYS-enhanced LCOS technology and 1.5x optical zoom lens, producing exceptionally accurate images. A built-in USB port enables "PC Free" presentations. Other features include PictBridge camera compatibility, an HDMI terminal (version 1.3 deep color) for projection of high-quality digital images and 1080p video, and a built-in RJ-45 network connection for remote management.

Canon Digital Learning Center

Canon's collaborative effort with professional imagemakers, the Canon Digital Learning Center (CDLC) is an on-line educational resource designed to help users evolve and advance their skills. From information on a variety of Canon imaging equipment to tips on composition, lighting, video and printing techniques, the CDLC informs and inspires at every step to help give your projects a sleek, professional-looking polish.

Simply visit **learn.usa.canon.com** and get started today!

CANON **DIGITAL LEARNING CENTER**

Events Calendar

EOS HD Video Production Tutorials

Home Page

Video Knowledge Base

Galleries

Expand Your Knowledge

The CDLC is free and open to the public, easily accessible anytime, anywhere via the Internet, using a personal computer or a mobile device. For the pros and by the pros, yet a valuable resource for all skill levels, the CDLC covers topics of interest to advanced amateurs and professional users of Canon imaging products. Continuously updated, the CDLC contains an ever-growing collection of practical information with time-saving navigation and search tools that help you find what you need quickly and easily.

Expand your product and software knowledge and gain proficiency through tutorials written by experts. Watch How-To videos on a wide variety of imaging topics, including equipment and techniques. Visit galleries to be inspired by some of the world's most eye-catching and history-making still and motion images. The Tips and Techniques section, written by professionals, instructs on how to make the most of your Canon professional equipment, from DSLRs and HD video cameras to large-format printers, to create a spectacular end-product. Download QuickGuides that you can print and take with you for study and reference. Go behind the scenes at professional photo and video shoots and learn by watching the nation's greatest imagemakers practice their crafts. Gain valuable insight from interviews with top pros.

Video Tutorials Gallery

For those who want to go beyond online learning, the CDLC also hosts a Sponsored Events Calendar. Users can browse through a comprehensive selection of workshops, seminars, lectures and trade shows throughout the country. All combined, the CDLC is an extraordinary resource for pure inspiration and technical mastery of your Canon professional imaging products.

Camera Tutorials Gallery, and Sample Tutorial Video

Canon Live Learning

Canon Live Learning (CLL) presents exclusive on-site educational experiences offered around the country delivering dynamic learning opportunities for enthusiasts and professionals through workshops and high quality hands-on classes. Led by industry experts and professional photographers, including Canon's Explorers of Light, you will gain both technical and creative expertise through these exciting programs.

CANON **LIVE LEARNING**

For current course offerings and behind the scenes videos of our workshops, visit: **usa.canon.com/canonlivelearning**

Learn from the Pros

For Professionals

For professionals, CLL offers high-level instruction based on achieving results. Canon provides professional imagemakers with the educational resources needed to stay in touch with industry demands.

With instruction from industry pros, discover new creative and technical opportunities made possible by EOS HD-capable DSLRs. Our hands-on intensive workshops are designed for video and film professionals who want to master the cinematographic capabilities of the EOS HD DSLR, as well as still photographers looking to expand their professional offerings to the moving image. New professional offerings are always in development for our range of still, print and moving imagemakers.

For Enthusiasts

Canon brings enthusiasts to a new level of experience with single-day and weekend immersion events to optimize creativity.

Canon's inspirational Explorers of Light and other industry professionals lead workshops and seminars, teaching enthusiasts the keys to maximizing their personal vision through field proven techniques and creative insights. Overviews on HD Video and Canon Speedlites lay the groundwork for a broad range of technical and creative skills aligned to your personal style.

Canon Live Learning: Workshops and Classes page

For the adventuresome enthusiast, Canon combines some of the most beautiful and exciting locations in the USA with our elite Explorers of Light instructors for the EOS Destination Workshops. These intimate two-day workshops take the CLL experience into the field. Past workshop locations have included Arches and Yosemite National Parks, surfing competitions in California, and thoroughbreds in the historic racetracks of Kentucky.

COMMITTED TO **SERVICE & SUPPORT EXCELLENCE**

A true industry leader understands that reputations are earned one customer at a time, which is why Canon has at its foundation an uncompromising dedication to product reliability, service and support. From cutting-edge technology to industry-leading response times, Canon U.S.A. takes pride in delivering complete customer satisfaction.

National Service Network

The Marketing Engineering Technology Center (METC) provides true factory-level service right here in the United States. Staffed by Canon factory-trained technicians, our service operations achieve industry-leading turnaround times and quality of repair. Our state-of-the-art facilities include a precision lens center and a climate- and particulate-controlled clean environment for the handling of sensitive equipment. Our service operation extends its reach through the Canon Regional Factory Service Centers and the National Authorized Service Network located from coast to coast. Canon supports a number of environmental and recycling initiatives including a Zero Landfill Product Re-use & Recycling Program.

Canon Recycling Program

Factory Service

Customer Contact Center

Canon U.S.A. maintains a 100% U.S.-based call center staffed with over 500 Canon employees. Whether by telephone, e-mail or the Web, highly trained specialists stand ready to assist Canon customers at every level of expertise. Committed to quick and easy resolution of all support issues, our specialists deliver industry-leading response times and quality support. Canon is further committed to continual service improvement and investment in customer support technologies.

100% US-based

Professional Service

CPS. Canon Professional Services

Canon Professional Services (CPS) provides significant membership benefits to individual full-time working professionals who use qualifying Canon equipment. In addition to 24x7 international and domestic telephone support, CPS offers to qualified members (depending on membership level) expedited and discounted repair service, service loaners, equipment evaluation loans, free "clean and check" coupons, on-site support at shows and events, discounts on Canon Live Learning workshops and more.

Recognition for Excellence

PCMag.com Readers' Choice Award for Service & Reliability 7 Years in a Row!

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READERS' CHOICE PC

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Canon Digital Cameras

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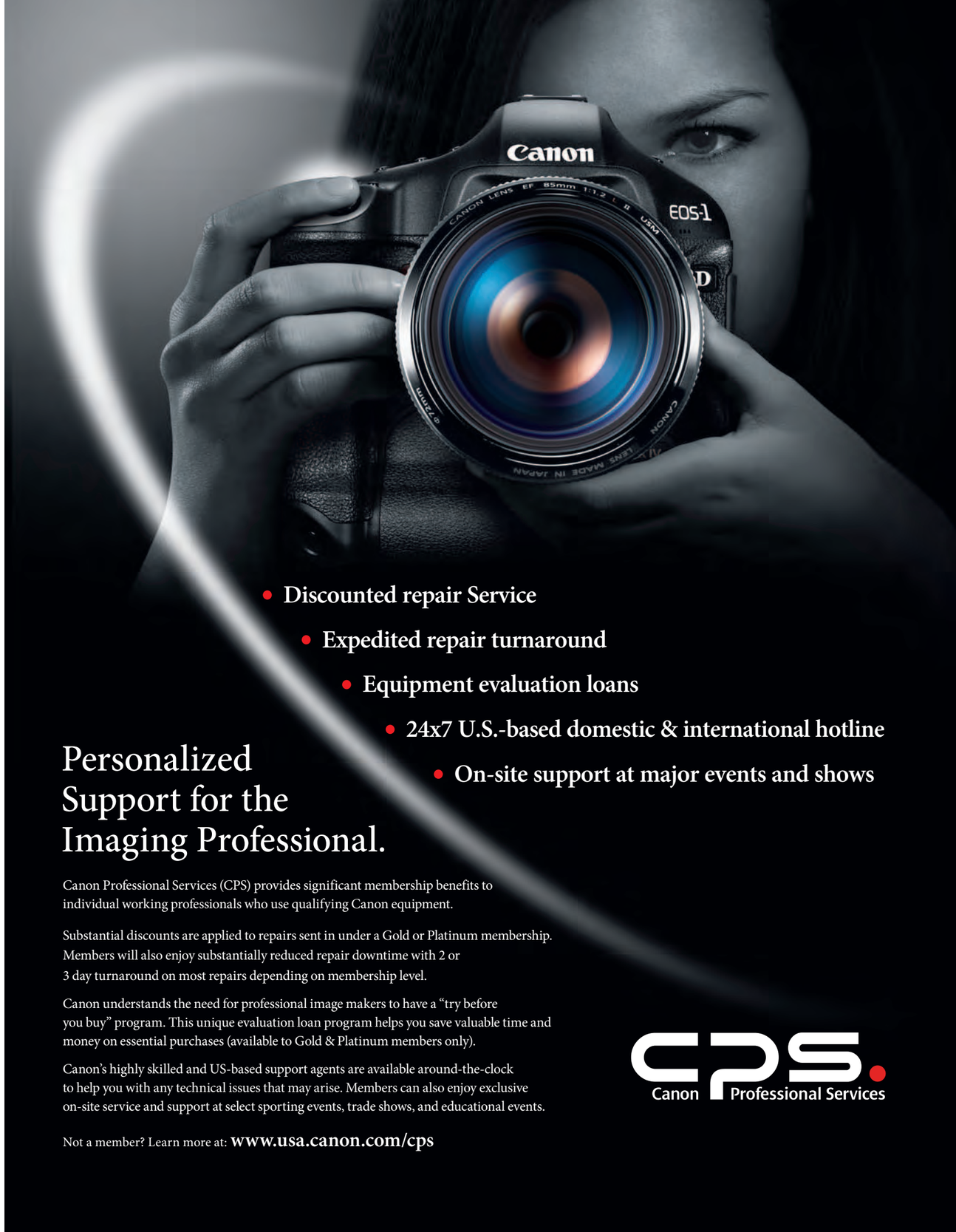

- Discounted repair Service
- Expedited repair turnaround
- Equipment evaluation loans
- 24x7 U.S.-based domestic & international hotline
- On-site support at major events and shows

Personalized Support for the Imaging Professional.

Canon Professional Services (CPS) provides significant membership benefits to individual working professionals who use qualifying Canon equipment.

Substantial discounts are applied to repairs sent in under a Gold or Platinum membership. Members will also enjoy substantially reduced repair downtime with 2 or 3 day turnaround on most repairs depending on membership level.

Canon understands the need for professional image makers to have a "try before you buy" program. This unique evaluation loan program helps you save valuable time and money on essential purchases (available to Gold & Platinum members only).

Canon's highly skilled and US-based support agents are available around-the-clock to help you with any technical issues that may arise. Members can also enjoy exclusive on-site service and support at select sporting events, trade shows, and educational events.

Not a member? Learn more at: **www.usa.canon.com/cps**

CPS. Canon Professional Services